Correct Language Use: How Syntactic and Normative Constraints Converge

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Introduction

Language, however we construe it precisely, is used by people in everyday communication. It is sometimes used in a very systematic way. Often it is adequate enough. But sometimes it is not quite clear whether a particular noise or a string of signs may count as language use at all. Still, language use seems to be stable enough for most purposes and its use is certainly not completely arbitrary. The present thesis is about why and to what extent that is so.

One common proposal has it that language use is not completely arbitrary because linguistic expressions are usually meaningful expressions. And the meaning any expression has, so the proposal continues, is a matter of fact. It is with this proposal that I shall begin part A of the present thesis. Or rather, I shall begin with an argument which questions the picture behind it and which seeks to establish that meaning is completely arbitrary. It will emerge that the argument for the arbitrariness of meaning is a serious threat to common intuitions. The upshot of part A will be that only a handful of strategies for rejecting the argument have good prospects of fending off the argument for arbitrariness.

In part B of the thesis, the different strategies for rejecting arbitrariness will be assessed in a more thorough manner. It will be asked whether they can explain the difference between merely thinking that language is used correctly and it being the case that language is used correctly. Part B is thus about objectively correct language use. One of the major questions will be on what objective grounds speakers can claim that they are using language correctly and that they are not merely thinking that they do.

In part C, the focus will be on the capacities, which enable humans to use language. And as this is also a central research topic in linguistics, the relation between philosophical and empirical investigations into language use must be clarified as well.

This introductory overview is very abstract and covers much ground. Throughout the thesis, the arguments will remain at a level of considerable abstraction and many more issues will be touched upon without being treated comprehensively. But I do nevertheless hope that the details provided in the body of the text will show why the set-up presented here is fruitful for a philosophical study of the nature of language use. And even though I shall endorse a specific account of the nature of language use, I do not purport to provide a conclusive proof of it. Instead, I shall be happy enough if most readers find the set-up illuminating and conducive to their own thought.

Part A

Correct Language Use and Rule-Following Scepticism

1) Kripke's Wittgenstein

The question whether language use could be completely arbitrary is a rather recent one. It mainly emerged from independent exegetical works by Saul Kripke (1982) and Crispin Wright (1980) on Ludwig Wittgenstein's views on rule-following. For present purposes, I shall concentrate mainly on Kripke's work.

Saul Kripke's *Wittgenstein on Rules and Private Language* is a very influential book. During the last 30 years, more than 500 articles have been written about it and many of its central topics are still debated today.[1] The topic presently under discussion is sometimes called 'metalinguistic correctness'. Kripke takes metalinguistic correctness to be concerned with the correct usage of linguistic expressions based on what those linguistic expressions mean.[2] In addition, accounting for metalinguistic correctness centrally involves explaining how an indefinite number of new language uses can be based on a finite number of preceding ones. In order to make the notion of metalinguistic correctness clearer, Kripke contrasts it with arithmetic correctness. Computing 125 as the sum of 57 and 68 is correct in the arithmetic sense, because 125 is the sum of 57 and 68. On the other hand, computing 125 as the sum is metalinguistically correct if 'plus' in '57 plus 68' picks out the arithmetic function which yields 125 as an answer when it is applied to the numbers expressed by '57' and '68'.

One should not be mislead by Kripke's terminology. Metalinguistic correctness merely explains the usage of linguistic expressions in terms of what these expressions mean. And making correct language use the central topic of the present thesis hence suggests that the present discussion is to a large extent about issues surrounding the concept of meaning. Now, when Kripke distinguishes metalinguistic from arithmetic correctness, he also insinuates that the meaning of a linguistic expression alone is not always sufficient to determine correct use. Making arithmetically correct statements, then, might not only turn on what one's words mean, but also on whether one calculates correctly. Even if the meaning of the words used to talk about arithmetic do determine the correct result or establish which result is correct, that would be something that must be argued for and cannot be presupposed.

There are also other cases in which the meaning of linguistic expressions do *prima facie* not suffice to determine the correct use of those expressions. Getting the facts right, for example, does often not only depend on meaning, but also on what is the case. And having a good warrant for the claims one makes might not only depend on meaning, but on what counts as a justification. So we should at least distinguish between language use which is

[1] In May 2012, Google Scholar counted 2085 academic works citing it.
[2] Kripke 1982:8

correct by virtue of meaning, correct by virtue of the facts and correct by virtue of warrant. Instead of Kripke's notion of metalinguistic correctness, I shall henceforth speak of language use that can be semantically correct and in addition to that I shall also presuppose that language use can be correct or incorrect in a factual or epistemological sense. A complete account of correct language use distinguishes these three kinds of correctness and provides an explanation of how they are related.

In order to see how Kripke approaches semantic correctness and its relation to factual and epistemological issues, two kinds of question are raised. First, there are metaphysical questions. What constitutes language use? What sort of fact determines what linguistic expressions mean? Second, there are epistemological questions. How can we know that a particular use of a linguistic expression is correct? How can we justify that we do know whether a particular use is correct or not? Any account of the relation of meaning and language use must answer these metaphysical and epistemological questions and an account passes muster only if it provides suitable answers.

In Kripke's book, the issues surrounding the relation of meaning and use are introduced via sceptical doubts concerning the very possibility that the metaphysical and epistemological questions can be answered. Kripke takes his cues from Ludwig Wittgenstein, yet develops them independently of Wittgenstein's texts. The result is a serious challenge for any attempt to explain meaningful language use, because the doubts suggest that language use can never be either factually or epistemologically correct. This also questions semantic correctness, for if an expression's meaning does never count as a fact constituting correct language use or as justifying a particular use as correct, the concept of meaning appears to be a completely arbitrary concept.

The sections below are about sceptical doubts along these semantic, metaphysical and epistemological lines. The question concerning the extent to which Kripke's Wittgenstein—commonly called 'Kripkenstein'—is identical with Wittgenstein will be partially neglected. Another issue that will not be discussed much is whether there can be a completely naturalistic account of correct language use.[3]

A point to be noted is that the reading of Kripke's book proposed below develops the sceptical doubts solely on the basis of issues surrounding linguistic extrapolation: any

[3] There is, however, a widely spread consensus that such accounts collapse into the dispositionalist proposals Kripke discusses and that they share their fate; see Boghossian's 1989b for discussion. I shall, however, discuss naturalistic accounts of some specific aspects of what it is to know a language in part C.

admissible account of language use should explain how an indefinite number of new language uses can be based on a finite number of preceding ones. That is controversial. Some commentators have claimed that further assumptions are made (or required) to get scepticism off the ground. The reading of Kripke's book proposed below offers corrosive sceptical doubts without any such further consideration. Recent claims that further assumptions are needed will be assessed and rejected after the sceptical scenario has been introduced.

1.1) The Sceptical Scenario

Paradoxical Language Use?

Kripke writes that the sceptical paradox cannot be understood as presenting either his own or Wittgenstein's point of view, even though the book is meant to convey an essential point of Wittgenstein's later work. Rather, it should be seen as 'Wittgenstein's argument as it struck Kripke'.[4] The sceptic was henceforth called 'Kripkenstein's sceptic'. In order to set up the sceptical scenario, I shall say more about how Kripke understands semantic correctness and address some preliminary issues concerning it. After that, I shall introduce Kripkenstein's sceptical scenario.

By '+' I refer to addition, a mathematical function. In expressions containing two integers separated by a plus, such as '12 + 5' or '57 + 68', '+' is used to refer to the addition function with two positive integers as arguments. The addition function is easy to compute for small integers and produces one integer for every pair of arguments.

Note that '+' is a linguistic expression and that semantic correctness is concerned with the correct usage of linguistic expressions based on what those linguistic expressions mean. Now, grasping the meaning of '+' involves grasping how '+' is used correctly. Intuitively, this seems also to involve that I grasp how to use '+' in indefinitely many new cases and based on a finite number of preceding occasions of having used '+'. This naturally leads to the assumption that by grasping the meaning of '+' I also grasp a rule which determines how I compute indefinitely many additions the expression of which involve '+'.[5]

We should be careful not to jump the guns here. We must insist that 'indefinitely' is simply used to express a concession that we do not know how many particular uses of '+' are based on a finite number of preceding uses. For if we do not add this caveat, 'indefinitely' may be read as expressing an assumption that there are possibly infinite particular uses of '+'

[4] Kripke 1982:5
[5] Op. cit. p. 7-8

which are based on a finite number of preceding uses. This second reading suggests that we must also ask how something finite can determine something infinite at all. If we do not add the caveat, we find ourselves in a quandary that has no literal basis in the text.

The two readings of 'indefinitely' also lead to two distinct notions of a rule. First, if 'indefinitely' simply means that we cannot count the number of cases determined by the rule, the rule can be said to govern the use of '+' but does not determine it rigidly, because there need not be a definite set of correct applications of the rule. Second, if 'indefinitely' means something like 'infinitely' or 'possibly infinitely', the rule governing the use of '+' can still be thought to determine rigidly—there might be a definite set of correct applications of the rule. In the first case, rules merely provide directions and in the second case, they are more like rails.

The first notion of a rule, where we have relaxed determination, is more appealing, because we can easily make sense of the idea that rules have exceptions and that those exceptions do not prove in any way that the rule is defective—rather, the existence of an exception in a particular case may prove that there is a general rule. If public drinking is forbidden in an area unless it is a national holiday, the exception on national holidays proves that public drinking is generally forbidden in that area. It is quite difficult, on the other hand, to find rules for which every exception must be counted as a defect. Such rules can hardly be called rules at all, because they do not allow for exceptions that prove them. The notion of rules as rigidly determining hence seems to confuse the concept of a rule with the concept of a law.

There is also a second aspect to why we should be careful not to understand rules as rigidly determining. Following rules is a conscious activity and the agent can explain why she follows a rule or which rule she follows. It is thus natural to hold that rules are followed intentionally. If rules did, however, rigidly determine a possibly infinite number of particular actions, an agent's intentions must comprise, in a sense yet to be explained, such possible infinitudes. It is hard to show how a finite mind can form intentions comprising possible infinitudes. We should therefore be wary not to read too much into the term 'indefinitely', because it may lead us to make claims which require justification and for which justification is not easy to come by. Those drawn to the idea that rules determine rigidly are well advised to allow the weaker reading of 'indefinitely' as well and be prepared to provide arguments if they want to read their preferences into the issues at hand.

This makes clearer in which sense we speak of rules in the present context. It is preferable to regard them as providing directions rather than rails. It thus becomes innocuous

to claim that any rule requires that my intention to follow it determines what is to count as following that rule for indefinitely many cases in the future, even though there may be exceptions. We can now also formulate a more precise notion of semantic correctness, according to which the correct use of a word depends on there being a rule and a language user, whose intention to follow the rule determines indefinitely many cases of semantically correct language use. In other words, accounting for the relation between meaning and use means, first and foremost, accounting for how semantically correct language use involves extrapolating from a finite number of preceding occasions. The *explanandum* is therefore called 'grasping as extrapolating':

> (Grasping as Extrapolating)
> Grasping a rule for the usage of a meaningful expression centrally involves extrapolating a possibly indefinite number of new applications based on a finite number of known cases.

Uneasiness about the notion of a rule might lead one to replace 'rule for the usage of a meaningful expression' through 'meaning of an expression'. For unless we find independent reasons that necessitate speaking of rules, the concept of meaning can be used to explain the sort of extrapolations at stake here just as well.

Note also that grasping as extrapolating is not necessarily confined to purely linguistic cases. The application of concepts in general requires extrapolation as well. It makes perfect sense to treat concept application along the lines of semantic correctness. If I have the concept of a cat, that concept can be applied to indefinitely many cats, but we must hold that the concept does not determine its applications rigidly. After all, the concept of a cat cannot be applied to a black cat in a dark alley at night, because the circumstances make it impossible to apply the concept at all. Exceptions hence play a similar role in concept application as when rules are applied or linguistic expressions are used. This finding can be condensed into the following definition—the primary *explanandum* of Kripkenstein's considerations:

> (Grasping as Extrapolating)
> Grasping a rule, a meaning of a word or a concept centrally involves extrapolating a possibly indefinite number of new applications based on a finite number of known cases.[6]

With these clarifications in the background, let us move on to the introduction of Kripkenstein's sceptical scenario. Consider the quaddition function, which works just like the addition function for arguments smaller than 56. But if one of the two arguments is larger than 56, the function always yields '5' as a result. Accordingly, it is conceivable for some curious circumstances that '+' signifies 'quus', which denotes the quaddition function.

[6] Cf. Kusch 2006:6

Now, imagine that I have never computed any addition function with arguments larger than 56, but several with arguments smaller than 56 and I was always right. Suppose I encounter a situation where I am asked to compute 57+68. As I understand addition by '+', I compute 125 as an answer. I probably rely on how I have computed the function for smaller arguments in the past. Let us grant that I perfectly remember how I did it back then—assume extended epistemological powers as you will. Reminding myself that I have only computed smaller arguments before, I check the answer again and still get 125. Now I am confident and answer '125'.

Kripkenstein's sceptic walks in on me and objects that the correct answer is 5, not 125. Note that he does not question 125 to be the correct answer in the arithmetical sense, he questions correctness in the semantic sense. The reason why I am wrong, he claims, is that I am—due to some adverse circumstance like having a hallucination (and not knowing it) or being under the influence of a malign spirit—mistaken about what I formerly meant by '+'. He claims that in the past I referred to the quaddition function by '+', but just now I mistakenly thought that I always meant addition by '+'. Given that meaning of '+' I should indeed answer '5' and not '125'. Kripke is aware how crazy this objection sounds:

> Now if the sceptic proposes his hypothesis sincerely, he is crazy; such a bizarre hypothesis as the proposal that I always meant [quaddition] is absolutely wild. Wild it indubitably is, no doubt it is false; but if it is false, there must be some fact about my past usage that can be cited to refute it. For although the hypothesis is wild, it does not seem to be *a priori* impossible.[7]

So, if we want to answer the objection, Kripke insinuates, we must show that scepticism is *a priori* impossible. But there are other strategies to counter the objection. A simpler way of answering the sceptic involves turning the tables and asking the sceptic himself to show why the particular case of language use he doubts to be correct is actually incorrect. Turning tables like that involves rejecting the idea that the mere conceivability of incorrectness is enough to successfully question whether a speaker uses language correctly when it appears to the speaker that he actually does use language correctly. In order to put the strategy into action, one must argue that a speaker is authoritative about what he counts as correct language use, unless some fact obtains that overrides such claims. What sort of fact counts as appropriate remains yet to be determined, but the mere conceivability of incorrectness will not do as a reasonable basis for sceptical doubts. An answer along these lines does still allow the sceptic to raise his objection in other particular cases, because the answer does not rule out the very possibility of scepticism. Despite this drawback, such a simpler answer is easier to come by,

[7] Kripke 1982:9

for it evades very abstract and complicated reasoning due to having to explain what '*a priori* impossible' means. It is, at any rate, wrong to think that answering the sceptic necessarily leads to a discussion of *a priori* possibilities concerning semantic correctness.

No matter what way of answering the sceptic I choose, I need a suitable fact to counter the sceptic's doubts. The fact—if there is one—must constitute my meaning addition by '+' and the same fact must also justify my answer '125'. It may settle *a priori* that there is such a thing as correctness and it may also explain why I know it when I answer the sceptic. But alternatively, it may merely settle that I am authoritative about what counts as correct in this particular case and that the sceptic does not have the appropriate evidence to overthrow this authority.

Unfortunately, for whatever fact I cite the sceptic will question me in a similar vein: if I cite the justified and true belief that 125 is correct, the sceptic will object that I actually meant to cite a schmelief, which is the justified true belief that 125 is correct if neither argument of the addition function is larger than 56 and that 5 is correct for larger arguments. Or if I cite the fact that my calculation behaviour was correct and prove it by showing my written calculations, the sceptic will say that I actually meant to cite the fact that my calculation schmehaviour was correct, where a calculation schmehaviour is just like my behaviour in calculating correctly for arguments smaller than 56, but which yields 5 as the correct answer for larger arguments.

Whatever I can think of that could serve as the appropriate fact, the sceptic can go on with his game and transpose the objection. He applies his global scepticism about meaning whenever I try to rise to the challenge and he seems to succeed no matter what sort of fact I come up with. And at this point the sceptical paradox emerges: on the one hand, we are sure that there is an appropriate fact and that we are authoritative about what we mean; on the other hand we cannot, it seems, pin it down in a way that finally silences the nagging sceptic. Taken for granted that issues concerning language use are basically semantic issues—which may involve factual or epistemological issues at the periphery—we can formulate the sceptical conclusion that there is no fact of the matter about what any expression means.

Note that calling the conclusion 'sceptical' is not entirely accurate. It is not only the case that nobody ever knows a fact of the matter about what any expression means, but that there is no such fact. Scepticism is generally understood to be an epistemological problem. The sceptical conclusion presented here is, however, also a metaphysical problem, for even allowing for extended epistemological powers does not change the situation. Kripkenstein's sceptic thus expresses a nihilism about meaning.

Some Possible Replies

There are obvious candidate facts which we can consider to test the soundness of the sceptic's conclusion. Kripke mentions several of them and emphasises that there are no limitations on what sort of fact may be considered.[8] It will be worthwhile to look at some candidate facts from Kripke's text.[9] Letting 'S' stand for some arbitrary speaker and 'x' and 'y' denote arbitrary integers, some of the candidate facts are:

1) the totality of S's previous behaviour with the '+' sign
2) the fact that S's use of '+' is governed by a counting rule
3) the fact that the hypothesis that S meant addition by '+' is the simplest such hypothesis
4) the fact that when S uses '+' he has an irreducible experience, with its own special quale, known directly by introspection
5) the fact that meaning addition by '+' is 'a primitive state, not to be assimilated to sensations or headaches or any "qualitative" states, nor to be assimilated to dispositions, but a state of a unique kind of its own'[10]
6) the fact that S grasps an objective and abstract entity—the sense of '+'—and that this determines the addition function as the referent of '+'
7) S's past mental history, construed in terms of episodic mental states
8) the fact that S is disposed, when asked to compute 'x+y', to reply with the result of adding x and y

Let us turn to the first candidate fact. According to it, the totality of S's previous behaviour with the '+' sign is supposed to determine language use.[11] That proposal builds on the idea that one's intention to follow a rule is to be accounted for in terms of how one behaves. But considering the sceptical scenario, we find that nothing in the totality of S's previous behaviour involving '+' settles whether S intends to follow the rule for addition or the rule for quaddition, because both rules were by definition indistinguishable until now. They were also indistinguishable in how one is to behave when following them and this shows that the first candidate fact is not helpful at all.

The second candidate fact is the fact that S's use of '+' is governed by a counting rule.[12] Kripke considers a case where the use of '+' is governed by a specific counting

[8] Kripke 1982:14
[9] The list follows Miller 2010.
[10] Kripke 1982:51
[11] Op. cit. pp. 14-15
[12] Op. cit. pp. 15-16

procedure with marbles: count out 57 marbles and form a heap, count out 68 marbles and form another heap, put the heaps together and count out the new heap—the resulting number of marbles is the correct answer to '57+68=?'. The problem here is that the sceptic can question the correctness of 'count' just as much as he questioned that of 'plus'. He may object that I formerly meant to quount by 'count' where to quount means counting out heaps with less than 56 marbles or directly answering '5' if one heap has more than 56 marbles. The problem will not be solved by simply explaining addition in terms of counting, because counting is subject to the same sceptical doubts.

One might want to buttress the claim with a metaphysical consideration along the following lines. Mereology, the study of part-whole relations, may play a role if we allow an Aristotelian conception of those relations. Such an Aristotelian conception of mereology holds that a whole is always more than the sum of its parts.[13] Applying this idea to the addition case, we may be tempted to say that the intended result of my counting procedure is to be independent of how I compose it from sub-heaps.[14] That strategy can be generalised, we might want to claim that the result of going through a rule-following process is to be independent of its composition in terms of process-stages, for there are infinitely many ways of cutting such a process into stages. This seems to be a good idea if one understands the sceptic as questioning one's rule-following through drawing one specific process-stage into doubt. But that construal of the paradox is wrong. The sceptical doubts concern the whole process, because if they did not, no general claims about correct language use and meaning would be forthcoming. It does, for present purposes, not matter whether the rule is somehow more general than (and therefore independent of) any stage of complying with it. This appears clearly if we consider that the sceptic does not care how S dissects the rule-following process into particular stages. Recall that he even allows that S can perfectly remember how he followed the rule in the past. The sceptic did not restrict either what candidate facts are available to answer his scepticism and this rules out the possibility that the sceptical doubts are meant to be restricted to specific stages of a rule-following process.

Next is the fact that the hypothesis that S meant addition by '+' is the simplest such hypothesis. This third candidate fact also fails to rise to the challenge, because it only gives an account of why S is justified to claim that he meant addition by '+'. The proposal does not answer the metaphysical challenge which is about what fact constitutes that S meant addition by '+'.[15]

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[13] Fine 1999 proposes a contemporary account (but not as a solution to the sceptical doubts).
[14] Kripke considers this strategy in op. cit. p. 17.
[15] Op. cit. p. 39

The fourth candidate fact is the fact that when S uses '+' he has an irreducible experience, with its own special quale, known directly by introspection. Meaning addition by 'plus' or '+' feels one way and meaning quaddition feels another way. Introspection allows S to know what he felt when he used '+' and that same way of knowing is not open to the sceptic. But how can appealing to such a quale justify S's claim to the sceptic? After all, the sceptic has no way of assessing such grounds for the claim—so why should some irreducible experience justify S's answer to him?

Kripke questions whether it is intelligible anyway that a quale helps me figuring out whether '125' or '5' is the correct answer to '57+68=?'.[16] It remains unexplained how a finite singular state with a distinct quale can determine an indefinite range of ways of employing a word. After all, a finite singular state is supposed to be finite, because it draws its content from having determined only a finite number of language uses so far. It is hence completely unclear how such a quale can justify or constitute semantic correctness as long as grasping as extrapolating remains unexplained.

The quale proposal can be elaborated in a way that directly leads to an alternative candidate fact. As a fifth candidate, consider the fact that meaning addition by '+' is 'a primitive state, not to be assimilated to sensations or headaches or any "qualitative" states, nor to be assimilated to dispositions, but a state of unique kind of its own'.[17] The idea, in other words, is that the relevant fact is not to be explained in terms, which eschew semantic or intentional vocabulary, but that the relevant fact is *sui generis* instead. According to this proposal, the sceptic suggests an illicit reduction of meaning-facts to something else, as that amounts to asking for a further fact that constitutes and justifies semantic correctness.

Stretching Kripke's own reasoning a bit, the objections against this fifth candidate fact are straightforward: the proposal is *ad hoc* and mysterious. The proposal is mysterious, because if we assume that any mental state is finite, we have not explained how it can determine an indefinite number of language uses as semantically correct.[18] And adding that such states are primitive does not explain it either. The proposal is also *ad hoc*, because its proponent apparently resorts to the *ad hominem* sophism that the sceptic has not understood what primitive states really are in the first place.

Many commentators have, in order to defend their anti-reductionist views, objected that Kripke does not sufficiently argue for the reductionism that they detect behind the sceptic's doubts. While that might be right, this objection must still not be taken to license an

[16] Op. cit. p. 42
[17] Op. cit. p. 51
[18] Mental states are here said to be finite in the sense that they do not last forever.

evasive attitude towards the central problem for anti-reductionism: how can such a *sui generis* state (which must be finite) determine an indefinite range of particular language uses? Kripke invites anti-reductionists to say more about how they think that this can be made to work and why their proposal does not fail for the same reasons as the quale-proposal. Grasping as extrapolating remains the central *explanandum* even if the anti-reductionist strategy is adopted. Bemoaning Kripkenstein's alleged reductionism alone does not entail any suggestion on how to solve this issue. Anti-reductionists have to do better.

The sixth candidate fact is the fact that S grasps an objective and abstract entity—the sense of '+'—and that this determines the addition function as the referent of '+'. One first problem is, obviously, that we need an account of how any objective and abstract entity can be grasped by S. But even if we waive that objection for the sake of argument, we would still need an account of how an abstract entity, such as the sense of '+', can determine an indefinite number of uses of '+'. The sense of '+' must be an entity which has governed only a finite number of applications of '+' by one individual person so far. It is completely unclear how simply insisting that senses are abstract entities clarifies how such entities can govern new applications of an expression like '+' by the person. The proposal does not explain how grasping a finite number of correct uses of '+' through grasping a sense can constitute and justify an indefinite number of new uses of '+'. Rather, the problem appears again in a context in which we allow senses as abstract and objective entities and nothing seems to be gained by this. More must be said about what senses are, how we can apprehend them and how they can determine an indefinite number of language uses based on a finite number of correct language uses. If no further explanations along these lines come forth, the suggestion must be rejected.

The seventh candidate fact is S's past mental history, construed in terms of occurrent mental states. S's past mental history, it is presumed, governs new cases of language use through occurrent mental states of some sort. Unfortunately, this is not an answer to the sceptical challenge, but it provides the basis for an alternative wording of the central *explanandum*. The approach considering S's past mental history—construed in terms of occurrent mental states—simply proposes to reduce the finite number of semantically correct uses to what is contained in S's past mental history. If the finite number of correct uses is available as occurrent mental states of some sort, the question how an indefinite number of new uses can be extrapolated from it pops up again. The proposal does hence not answer the sceptical challenge, but simply provides a way of framing the issue that may make it more acute for some readers.

The eighth candidate is the fact that S is disposed, when asked to compute 'x+y', to

reply with the result of adding x and y. This proposal is a reaction to the failure of the seventh candidate fact. If occurrent mental states cannot determine language use, one might try non-occurrent mental states. According to this line of thought, to mean addition by 'plus' is to be disposed to add and to mean quaddition by 'plus' is to be disposed to compute the quaddition function instead. There are two problems with this. What, Kripke wonders, justifies that I know how I am disposed? And what does settle whether what I am disposed to say is indeed correct?[19] Surely, no disposition can justify a speaker's knowledge of this very same disposition and it is hard to see how a disposition can settle whether that which it determines is semantically correct. This already means failing to answer the sceptic's doubts, because the sceptic wants to know why I am justified to answer '125' rather than '5' and he also wants an account of semantic correctness which settles whether what I am disposed to say is what I ought to say. In other words, the dispositionalist strategy has severe problems to explain the justificatory and the normative aspect of semantic correctness.

It has often been argued that these objections to the dispositionalist strategy are not convincing. The next section contains arguments to the contrary. It will be shown in detail that some of Kripke's objections are very convincing once one perceives how the justificatory and the normative aspects of correct language use are connected.

Dispositions

The dispositional strategy is not exotic. Kripke writes that it is a response he often encountered in conversations about the topic.[20] The strategy is based, as we have seen, on the claim that one might simply be disposed to mean addition by '+' and one or several dispositions constitute what semantically correct language use is. Analogously, the intention to follow the rules governing addition when computing '57+68=?' need not be constituted by an occurrent mental state, one might simply be disposed, due to training or the biological design of human minds or whatnot, to answer '125'. A simple dispositional account of semantic correctness for arithmetic discourses runs like this:

> First, we must state the simple dispositional analysis. It gives the criterion that will tell me what number theoretic function φ I mean by a binary function symbol 'f', namely: The referent φ of 'f' is that unique binary function φ such that I am disposed, if queried about '$f(m,n)$', where 'm' and 'n' are numerals denoting particular numbers m and n, to reply 'p', where 'p' is a numeral denoting $\varphi(m,n)$. The criterion is meant to enable us to

[19] Op. cit. pp. 23-24
[20] Op. cit. p. 22

> "read off" which function I mean by a given function symbol from my disposition. The case of addition and quaddition above would be special cases of such a scheme of definition.[21]

The scheme of definition can be fleshed out through adducing explanations familiar from the natural sciences. This can be done by explaining my apprehension of the binary function φ through the function symbol 'f' in virtue of one or several dispositions to do so, which only work under specific conditions. There is a wide range of dispositions to choose from and there is also a wide range of conditions under which such dispositions work optimally. The more interesting proposals along these lines come from biological considerations, because they adduce a variety of circumstances in which some relevant dispositions are triggered. Specifying suitable circumstances may involve considering things like stimuli on nerve endings, electrochemical events in the brain or survival strategies of hominidae. Nevertheless, it remains to be shown how a dispositionalist can, even if he adduces such further considerations, successfully meet the requirements set by Kripkenstein's sceptic.

If we go back to the paradox, we see that the dispositionalist has more work to do than just to point out the right disposition (i.e. the one which constitutes semantic correctness). It must be emphasised that the first—and most powerful—objection Kripke raises is that the relevant constitutive fact must also justify me in meaning addition rather than quaddition; the relevant constitutive fact must hence also justify that '125' is the correct answer and '5' is not. The dispositionalist has not done that and, it seems, dealing with this further issue is not a straightforward matter.

Must a disposition, one may ask, not occur in some form of behaviour or mental state that I am aware of when I mean this rather than that? If the answer is 'no', we end up with no way to answer the justification-question—the disposition, we must then admit, magicked correctness into meaning addition by '+'. If the answer is 'yes', the sceptic points out that he had already questioned such occurrences and that the dispositionalist is in the same dialectical situation as anybody else. Note that this point remains if we hold that only experts can successfully track dispositions through evidence—the proposal that the only plausible dispositions are those accounted for in our best scientific theories does not change the situation. The justification-question cannot be answered along these lines.

There are further issues connected with the justification-question. We are usually authoritative about what we mean and intend and so are other people about what they mean and intend individually. It follows that we should not question other people's self-ascriptions

[21] Op. cit. p. 26

of meaning or intending something, unless we can provide convincing reasons, which throw doubt on such self-ascriptions of meaning or intending something.

But what does follow from this for the dispositionalist strategy? That we are justified in answering '125' rather than '5' appears to be conceptually intertwined with the sort of first-person authority just mentioned—at least as long as semantic correctness and not arithmetical correctness is concerned. It is difficult to see how such intuitions can go together with a dispositional analysis of meaning and intention. This is so, because the same disposition should justify different people to answer '125' and still, all of them should have a first-person authority when it comes to self-ascriptions of meaning and intention, but not when it comes to ascribing meaning and intention to other people. So, a disposition to answer '125' should, on the one hand, determine '125' as the semantically correct answer for any speaker and, on the other hand, the disposition should allow that self-ascriptions of meaning and intending are reasonable by default. How can a disposition determine language use for many speakers and still allow that self-ascriptions of meaning and intending are reasonable by default? Simple dispositionalism has no means to meet both requirements at the same time.

More sophisticated proponents of dispositionalism can argue that a speaker knows better than the sceptic what her disposition determines as semantically correct language use, because the default reasonableness of self-ascriptions of meaning and intending is simply built into the disposition. This manoeuvre ultimately amounts to invoking some sort of primitivism again. For what the sophisticated proposal comes down to is to say that the dispositions governing language use are primitive and that the sceptic can therefore not question them without violating them at the very same time. Such a primitivist dispositionalism is just as desperate as the anti-reductionism encountered in the previous section. But it is not necessarily as mysterious as the *sui generis* states of anti-reductionism, because the dispositionalist might be able to explain how a disposition determines an indefinite number of semantically correct language uses. Nevertheless, adducing primitive dispositions certainly is a hopeless move, because it means resorting to the *ad hominem* sophism that the sceptic has not understood in the first place what primitive dispositions (or primitive dispositional states) really are.

Kripke mentions yet another issue in connection with the justification-question which sheds more light on the differences between what dispositionalism offers and what is required to answer the sceptic.[22] Assuming that I mean addition by '+' and that my disposition to respond '125' when asked to calculate '57+68=?' secures that I am correct, does that not

[22] Op. cit. p. 24

amount to illicitly equating correctness and performance? After all, no matter what one is disposed to say, it will always be possible to assess what was said as correct or as incorrect. Such assessments are normative and they are especially common in situations where somebody says something for the first time. Pronouncing '125' as the result of a calculation one has never made before is very likely to be assessed as correct or incorrect no matter what dispositions made one pronounce '125' and not '5'. Explaining correct language use means, first and foremost, explaining on what grounds (viz. semantic, factual or epistemological) such normative assessments are made and it is hard to see how invoking dispositions can fully handle this demand. Downplaying the import of such assessments means downplaying the fact that language use can be (and often is) corrected. Downplaying the importance of correction means downplaying the natural assumption that the entire complexity of semantically correct language use is at least partially acquired through interaction.

It is especially difficult to explain away the importance of normative assessments for meaningful language use if concrete examples of nonsensical language use are brought forth. Consider the following two utterances:

- This vixen is not a fox.
- He has already cut three inches off the board and it is still too short.

One might come up with situations for which we can hold that a speaker was disposed to make these utterances and, after having been corrected, realises that he had made a mistake (or, if he meant to tell a joke, that his punchline had failed). Both utterances are always incorrect language uses—even though they may sometimes be funny—because both involve a misunderstanding of at least one word. One might not understand that vixens are female foxes or one might not understand that cutting off three inches means making something shorter by three inches. Yet, language users are not infallible and mistakes do happen. We should thus hold that, on a dispositionalist analysis, speakers can (in principle) be disposed to make such mistakes. And it is also natural to hold that it emerges later in an exchange whether making a particular utterance was a mistake, because assessing such utterances as correct or incorrect is independent of what dispositions constitute them. Nevertheless, the two examples just mentioned are always incorrect language uses and there are, hence, no meaningful uses for them—provided, of course, that merely having a comical effect does not make them meaningful. If this is right, then the dispositional account cannot fully explain what meaningful language use is, because a full explanation of meaningful language use requires an account of the normativity of language use.

A further objection to dispositionalism, one that commentators of Kripke's discussion

of dispositions have often found unconvincing, is this:

> The dispositional theory attempts to avoid the problem of the finiteness of my actual past performance by appealing to a disposition. But in doing so, it ignores an obvious fact: not only my actual performance, but also the totality of my dispositions, is finite.[23]

The problem of finiteness directly emerges from the sceptical scenario. If I intend to follow a rule, like the one governing addition, and I come into a new situation where I have to apply the rule, the past performances, being finite, need not determine how to follow the rule in the new situation. That was our way into the sceptical paradox and the so-called problem of finiteness is nothing else than the problem of grasping as extrapolating again.

Now, appealing to dispositions is meant to solve the problem of grasping as extrapolating. But it is not clear how appealing to dispositions can effectively solve the problem. Consider, for example, adding integers with dozens of digits in your head. What disposition can effectively solve the problem and provide the adder with a justification? Kripke claims that there are many such cases; no matter how the disposition which constitutes meaning addition by '+' is construed, we can easily come up with an addition problem that nobody can solve straightaway—and for those cases we do have no clue how to use '+' correctly. If the disposition cannot be said to be infinite, i.e. to determine rule-following for any new case, the sceptic may simply find a new case where rule-following is indeterminate again. By doing this, the sceptic seems to show that appealing to dispositions does not at all solve the problem of grasping as extrapolating.

But Kripke is too quick here. A witty dispositionalist can argue that all he needs are dispositions which determine an indefinite number of new cases. There is no need for dispositions that determine an infinity of cases.[24] Most dispositions in the natural world have circumstances under which they work optimally and circumstances under which they do not work at all. Salt's disposition to dissolve in water is readily actualised in circumstances in which pressure or temperature are increased, but it is slowly (or not at all) actualised if it is too cold, because the water will have a lower capacity to dissolve salt and any dissolution eventually stops when water is frozen.

One can hold that something similar is true for the dispositions determining language use. These dispositions also have optimal circumstances and under those they do work well: if the circumstances are right, the dispositions determining semantic correctness allow one to use language correctly in an indefinite number of new cases. Therefore, as soon as we do away with the idea that dispositions have to determine an infinitude of new language uses, we

[23] Op. cit. p. 26

[24] This point is widely accepted; cf. Blackburn 1984, Boghossian 1989b and Haukioja 2004.

can hold that—given the right circumstances—dispositions can determine an indefinite number of new language uses. And such a proposal is immune to Kripke's worries about finiteness, as long as the dispositionalist does not abuse the concept of optimality by putting into it everything it takes to make the proposal work. All the dispositionalist has to do is to define the range of optimal circumstances in a way which blocks the sceptic from demanding that an infinitude of extrapolations be possible.[25] A more elaborate dispositionalism along these lines will still have to deal with the justificatory question and it will have to explain how language use can be assessed as correct or incorrect no matter how one is disposed to use language. But Kripke's worries about finiteness are surely not insurmountable for the determined dispositionalist.

It is still not clear how invoking dispositions can help explaining the epistemological and normative issues involved in language use, but it seems that a proper analysis of meaning and intention can. Quite unlike dispositions, meaning and intention are not meant to settle what we will do or are likely to do, but what we are supposed to do if we want to count as meaning or intending something at all. Meaning and intention determine what is meaningful or what counts as intentional—whether rule-followers and speakers actually comply with it is another question. On that view, dispositionalism just shifts the lights from the real constitutive question, namely from 'what constitutes the meaningfulness or intentionality of doing it like this rather than doing it like that?' to a completely different constitutive question, namely 'what determines that I will do this rather than that?'. In order to explain where the dispositionalist proposal goes wrong in the first place, we must pin down precisely the difference between dispositions on the one hand and meaning and intention on the other.

Let us focus on meaning. What we find now is the following idea: the way meaning addition by '+' leads to uttering '125' as an answer to '57+68=?' seems to be different under a dispositional analysis than it is under an analysis which aims at settling meaningfulness, i.e. under an analysis which aims at settling what one is supposed to do in contrast to what one will do by virtue of some disposition. Fully understanding this point about normativity requires understanding why Kripke thinks that a dispositional analysis is not something Wittgenstein himself endorsed. It will be shown that this also requires understanding what exactly the normativity of language use comes down to for Kripke.

In *Philosophische Bemerkungen* Wittgenstein rejects Bertrand Russell's views on how desire and its objects are related.[26] The reason why Russell is deemed wrong is because he thinks that between a desire and its object we need something further in order to explain the

[25] Cf. Forbes 1983-4
[26] Wittgenstein 1984b:63

relation. For Russell, as Wittgenstein writes, we would have a desire to eat, and an object, maybe a slice of bread, and something else like a feeling of satisfaction when the hunger ceases. That is what Wittgenstein called an external relation between thought and fact (in the example we have a desire to eat and a slice of bread), because the relation needs something external to get established (in the example we had the satisfaction that installs itself when the desire to eat ceases). In other words, an external relation requires a mediating link between such *relata* like thought and fact, or desire and object. An internal relation, on the other hand, is one, which poses only a thought and a fact and construes them as immediately related. An internal relation is also constitutive of its *relata* and there is nothing further which grounds them. When we wonder about how thought and fact, or desire and object are related, we should not assume that they are externally related. We have an adequate explanation if we understand the internal relation between thought and fact, or desire and object; if we expect some mediating link, we are searching too far and miss the essential point of the issue.

Now, Kripke claims that something like the distinction between 'internal' and 'external' can still be found in Wittgenstein's *Philosophical Investigations* and other writings which are relevant to the rule-following debate. The only difference is that, in those later works, Wittgenstein would have refrained from explaining internal relations in terms of how thought and fact are related.[27] The reason why Wittgenstein must not be read as endorsing dispositionalism is that a disposition that constitutes meaning addition by '+' would require an external factor (something like satisfaction in the example) in order to make somebody answer '125' to the problem '57+68=?'.[28] But Kripke does not introduce the lesson from Wittgenstein in terms of external and internal relations between meaning addition by '+' and answering '125'. He phrases it in terms of "normativity" and "description" and points out the general philosophical importance of the distinction:

> The moral of the present discussion of the dispositional account may be relevant to other areas of concern to philosophers beyond the immediate point at issue. Suppose I do mean addition by '+'. What is the relation of this supposition to the question how I will respond to the problem '68+57'? The dispositionalist gives a *descriptive* account of this relation: if '+' meant addition, then I will answer '125'. But this is not the proper account of the relation, which is *normative*, not descriptive. The point is *not* that, if I meant addition by '+', I *will* answer '125', but that, if I intend to accord with my past meaning of '+', I *should* answer '125'. Computational error, finiteness of my capacity, and other disturbing factors may lead me not to be *disposed* to respond as I *should*, but

[27] I shall say more about internal relations below, where I compare Kripke's reading of Wittgenstein with the account of Baker & Hacker 1984c.
[28] Kripke 1982: 25-6, footnote 26

> if so, I have not acted in accordance with my intentions. The relation of meaning and intention to future action is *normative*, not *descriptive*.[29]

Some commentators have completely missed the point of this passage, because they ignore that the distinction between the normative and the descriptive is to mirror Wittgenstein's distinction between internal and external relations. It has sometimes been suggested that the distinction between the normative and the descriptive boils down to a distinction between prescriptive and constitutive rules.[30] Note that the first distinction is one between relating meaning and intention to later action and that the second distinction is one between two kinds of rules. We have already talked about the distinction between internal and external relations, so we should see what the distinction is between prescriptive and constitutive rules.

Prescriptive rules evaluate some action or state as mandatory in some situation. It is important that the action or state can be specified independently of the rule. If the rule holds that one should not leave the office before one's boss does, then not leaving the office before one's boss does will count as a mandatory comportment. But what counts as a mandatory comportment has got no influence on what counts as leaving the office. Constitutive rules, on the other hand, stipulate that some thus-and-so does count as such-and-such. The rules of chess describing castling stipulate what moves count as castling in chess. And the rules specifying castling also constitute what castling is—without the rules there would be no such thing as castling.[31] To wit, without the rules there would not only be no such thing as *correct* castling, but no such thing as castling *tout court*.

So, does the distinction between the normative and the descriptive boil down to a distinction between prescriptive and constitutive rules? No, Kripke does not draw a distinction between two kinds of rules; he distinguishes two relations between what words like 'plus' or symbols like '+' mean and how they are applied. When philosophers like Anandi Hattiangadi argue that semantic normativity is all about prescriptive rules, they neglect the point that normative relations—qua internal relations—are constitutive of their *relata*; even though they correctly hold that prescriptive rules are not constitutive of what they govern.[32] And when such philosophers go on to ask whether the term 'correct' in an expression like '"+" is correctly applied to addition' is normative or merely descriptive, they have not understood that the relation between '+' and its application is not to be mediated by

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[29] Op. cit. 1982: 37

[30] Anandi Hattiangadi 2007:57 and Glüer & Wikforss 2009 explicitly claim that the distinction between the normative and the descriptive mirrors the distinction between prescriptive and constitutive rules. They hence conflate normative relations and prescriptive rules.

[31] These distinctions were taken from Glock's 2003 and his 2009.

[32] Hattiangadi's claims are in her 2007:200-206.

any sort of ominous correctness-conditions if it is to be internal at all. Neither Kripkenstein nor Wittgenstein base their normativism on an analysis of the word 'correct'.[33]

There is, nevertheless, an important difference between Wittgenstein's internal and external relations on the one hand and how Kripke understands normativity on the other. For Wittgenstein, internal and external relations are categorically distinct.[34] But Kripke does not need to argue for such a categorical distinction between normative and descriptive accounts in order to fend off the dispositionalist. He may simply hold that the distinction is sufficiently settled by saying that dispositionalism cannot explain how speakers and rule-followers are justified in doing what they do, but that any normative account does (at the very minimum) cater for this explanatory need.[35] If Kripke is read this way, all issues surrounding normativity get absorbed in the justificatory question. Answering '125' when asked to compute '57+68=?' counts as correct and meaningful, because the answer is justifiable; answering '5' in the same situation counts as incorrect, because the answer is not justifiable. Saying what fact constitutes meaningful language use will also settle what fact constitutes justifiability. Actually justifying '125' as an answer means citing that fact.

If this absorption of normative issues into the justificatory question is accepted as a possibility, there may be no further questions concerning the status of prescriptions for language use and no argument for a categorical distinction between internal and external relations will be required. This does, however, not mean that a more substantial notion of normativity—one which drives a bigger wedge between the normative and the descriptive—is unavailable. The proposal simply has it that answering the sceptic does not require such a substantial notion.

We may still wish to hold, for reasons independent of the sceptical challenge, that constitutive rules settle what counts as meaningful language use and, hence, as justifiable language use. On such a view, normativity has got something to do with constitutive rules and mere descriptions do not. Constitutive rules will then be taken to indicate the sort of facts we may cite when attempting to reject the sceptical challenge. It is, however, not immediately clear how such a more sophisticated take on normativity can effectively explain grasping as extrapolating or how it provides a better basis for such an explanation than the simpler take on normativity which does not involve constitutive rules, but accounts for normativity in terms of justification only.

This ends the more detailed discussion of dispositions. The reason for zooming in on

[33] But some Wittgensteinians like Daniel Whiting 2007 argue for such a curious view.
[34] Compare the entry on internal relations in Glock 1996.
[35] This important point was first brought up by Zalabardo 1997.

these issues was that I wanted to convey a good sense of what the dispositionalist has to supply and how Kripke's views should be understood. The pivotal finding is that Kripkenstein can use Wittgenstein's distinction between internal and external relations to add bite to the justification question posed by his sceptic. The main idea is that Kripkenstein models a distinction between normative and descriptive relations between words and their use on Wittgenstein's distinction between internal and external relations. But Kripkenstein is only committed to a deflated conception of normativity which settles the justification issue—even though he may be entitled to a more substantial claim. For Kripkenstein, a normative relation between a word and its use obtains if that relation justifies a particular use of the word. It is licit, from that point of view, to equate the sort of normativity relevant to the question of semantic correctness with epistemic entitlement.[36] With this aspect of the sceptical paradox clarified, we can move on and consider two exegetical approaches to Kripke's book which have gained influence in recent years and which commit, as will be shown, several mistakes. My discussion of them is of course not meant to pillory the approaches, but to clarify Kripkenstein's paradox.

George Wilson's Alternative Reading of the Sceptical Paradox

In a series of influential articles, George Wilson has argued for dissecting the sceptical argument in a specific way, because this can allegedly help us to come to a more accurate understanding of the paradox.[37] He has, based on his dissection, claimed that what he deems to be the standard reading is misconceived and that he has a better alternative.[38] I shall only talk about Wilson's reading of the paradox, not about the consequences of this reading for Kripke's sceptical solution. The sceptical solution will be introduced and scrutinised independently in a further section below.

The so-called standard reading of the paradox has it that Kripkenstein's sceptic illicitly demands a reduction of facts constituting semantic correctness to something that can be specified independently of semantic or intentional vocabulary. Answering the sceptic then requires showing that an anti-reductionist proposal need not be desperate or mysterious. Against this reading Wilson holds that it misconstrues the kind of fact the sceptic wants specified. The allegedly wrong view summarises the sceptical challenge as follows:

> Kripke's Wittgenstein is deemed to start out from an assumption about the kinds of

[36] It will appear at the end of part B that Paul Boghossian and I both subscribe to this.
[37] Cf. his 1994 and his 2006.
[38] Wilson mainly refers to Wright 1984 and Boghossian 1989b.

> potentially relevant facts that exist and then to seek to "locate" among these a suitable subject matter for ascriptions of meaning. But, given the types of facts that the skeptic appears willing to countenance (e.g., 'facts about your previous behaviour and previous mental history') locating a subject matter for such statements can involve nothing less than some form of reduction of meaning to the already accepted factual base. This has the consequence that it is open to the skeptic's opponent to reject the presupposition that a reduction is either possible or required. Why not say from the outset that, among the facts that exist for *X* to recall, is, e.g., the fact that *X* meant addition by '+', and that fact is just what it is and not another thing.[39]

The reading expressed in this paragraph does not pay sufficient heed to Kripke's objections to anti-reductionist readings of the paradox. It is obviously not enough if the sceptic's opponent simply rejects the presupposition that a reduction is possible or required. The sceptic's point is that even if there is no reduction, grasping as extrapolating must be explained. For an anti-reductionist, this means answering the following question: how can a *sui generis* fact determine an indefinite range of correct applications of a linguistic expression or a concept? Wilson is right when he objects that the standard reading downplays the problems the sceptic finds with any anti-reductionist strategy. He is also right in claiming that anti-reductionists are not *prima facie* in the best position to answer the sceptic, because they exploit a seeming weak spot of the sceptical scenario. That much is clear. But it is a completely different question whether Wilson's own reading fares any better than the reading he criticises. That it does not will be argued here.

Wilson starts out by explaining in general terms what sort of account of meaningful language use the sceptic wants to attack.[40] When a speaker applies any general term or predicate, so Wilson's rendering of the sceptic's target, such terms can be applied correctly or incorrectly to objects. It is assumed—somewhat in the fashion of model theoretic approaches to formal semantics—that facts about a relevant domain of objects determine what counts as semantically correct and incorrect uses of a term. What the sceptic now demands from his opponent is an account of how the relevant domain of objects provides a standard of correctness for her language use. A natural idea would be to say that the objects in the relevant domain have properties, which are independent of a speaker's beliefs and language use. The standard of correctness, it can then be assumed, will be constituted by those properties. The sceptical challenge is thus understood as requiring an explanation of how these mind- and language-independent properties can govern a speaker's correct application

[39] Wilson 1994: 250-1
[40] Op. cit. p. 238

of a term.

All this suggests a specific conception of the normativity of language and that conception comes with a constraint on what counts as an adequate answer to the sceptic: If an individual speaker means something by a term, then there is a set of properties that govern the correct application of the term for the speaker. This is Wilson's normativity constraint.

It is also important for Wilson's picture of the sceptic's target position that semantically correct language use is grounded in facts about the relevant domain of objects. It is the properties of the objects, which constitute what counts as correct language use. More specifically, a speaker's past mental or social history, as well as his psychological powers, determine which properties within the domain count as constituting the standard of correctness relevant for the speaker. So, facts about correct language use must be grounded in the right way: If there is a set of properties that govern the correct application of a term for a speaker, then there are facts about the speaker that *constitute* the set of properties as the conditions that govern the speaker's use of the term. This is Wilson's grounding constraint.

The two constraints allow Wilson to rephrase the sceptic's challenge from the defendant rule-follower's point of view: the sceptical scenario is designed to show that the grounding constraint—that there are facts about the speaker that constitute the set of properties as the conditions that govern language use—cannot be fulfilled. Wilson holds that we get a basic sceptical conclusion (BSC) from this:

> (BSC)
>
> There are *no* facts about a speaker that constitute any set of properties as conditions that govern the speaker's use of a term.

The reason why we must infer from BSC that nobody can ever mean anything by a term is that there is nothing about any arbitrary speaker which constitutes a set of properties as the conditions which govern the speaker's correct use of the term. Thus, the more radical sceptical conclusion (RSC) follows straightaway:

> (RSC)
>
> No one ever means anything by a term.

The distinction between BSC and RSC now might serve as the basis for answering the sceptic. One might try to concede BSC and reject one of the two constraints in order to reject RSC. Now, if we reject Wilson's normativity constraint, language use becomes arbitrary, because there would be no such thing as correct or incorrect language use anymore. This is obviously not tenable as a solution, because we sought an account of correct language use. What we would get then is therefore just as bad as RSC. So, the grounding constraint has to go instead. This amounts to conceding BSC and to retaining the normativity constraint. We

reject, in other words, the requirement that there are facts about any speaker which constitute a set of properties as a standard of correctness, i.e. as conditions governing the speaker's use of a term. Whether this picture is a viable one independent of Kripkenstein's sceptical challenge is not important here. The relevant question is whether Wilson's picture contains a correct rendering of the sceptical challenge and whether it is, therefore, an account of meaning and language use which passes muster.

It seems hard, *prima facie*, to find grounds for an objection to how Wilson presents his more generally worded scepticism. After all, the sceptical challenge does indeed suggest that something is fishy about any attempted grounding of correct language use examined so far. But the picture changes if we ask whether the idea that properties constitute standards of correctness is something that Kripke would accept as being part of all targets against which the sceptic argues. We see this more clearly if we recall that the properties at stake are assumed to be independent of a speaker's thought and talk. And if we go back to the candidate facts Kripke considers, we find discussions of ways of construing correct applications which are by no means committed to such properties. Wilson's properties cannot, for example, accommodate the intuitions that behaviour alone or mental states alone might determine correct applications. So Wilson's way of recasting the argument illicitly downplays the fact that Kripkenstein's sceptic also targets possible accounts of language use which are not committed to autonomous properties constituting a standard of correctness. In other words, Wilson illicitly narrows down the range of positions against which the sceptic launches his attack. The upshot is that Wilson's reconstruction of the sceptical challenge is not as radical as Kripkenstein's original.

And there is more along these lines. Any conception of meaning that is based on the intuition that the relation between meaning addition by '+' and answering '125' does not need anything further to work does not appear questionable on Wilson's reading. In other words, Wilson's picture does not pose a challenge for anti-reductionists. The reason is that, according to Wilson's reading of the sceptic's target, the relation between meaning addition by '+' and answering '125' must always be mediated through the properties of the objects in a domain. So meaning-facts which are *sui generis* hence appear unproblematic, because they reject Wilson's particular grounding constraint anyway. According to anti-reductionism, meaning-facts take care of themselves and do not require mind- and language-independent properties which constitute a standard for them. But Kripkenstein's sceptic presents us with a paradox which does successfully question anti-reductionist accounts of meaning and intending.

Consider again the conception of semantic correctness Kripkenstein started with: the

correct use of a word depends on there being a rule and a language user whose intention to follow the rule determines indefinitely many cases of semantically correct language use based on a finite set of examples. It is hard to see where in Wilson's story anything similar to the problem of grasping as extrapolating—which is a major problem for anti-reductionism—shows up. Reminding ourselves that Kripke's discussion is all about this specific conception of correct language use, Wilson should have provided readers with an explanation of where Kripkenstein's initial conception of semantic correctness comes in in his reconstruction at all.

As things stand now, Wilson does not discuss semantic correctness as Kripke has introduced it, but rather how language users can successfully track properties which provide a standard of correctness for them. So, by offering an alternative to the reading of the sceptical scenario that anti-reductionists prefer, Wilson has crippled the sceptical doubts to a degree, which makes it lose its teeth and actually invites anti-reductionist proposals along the lines he originally wanted to reject.

It now appears that Wilson is confused about the scope of Kripkenstein's challenge and its essential elements. But can we retain some distinctions that Wilson has drawn to analyse the sceptical paradox into smaller chunks and, thus, enable a more detailed understanding of the problem it presents us with?

We may indeed find the distinction between BSC and RSC helpful, because it allows us to attempt a solution which grants BSC and rejects RSC—that is something that the standard reading did not allow.[41] But if my assessment is correct, our reason to accept the distinction should be independent from Wilson's two constraints, because they misconstrue the target of Kripke's sceptic. If no such independent reason can be found, the strategy against the sceptic, which we may want to adopt from Wilson, cannot lead far. However, if there is such a reason, we might see more clearly how BSC can be conceded without committing ourselves to RSC. This would, I surmise, be to the advantage of every future reader of Kripke's who needs a nifty and definite interpretation of the sceptical scenario. And I cannot imagine any serious philosopher of language who does not understand herself as belonging to that group of readers. But still, we must not simply help ourselves to the distinction between BSC and RSC.

Martin Kusch's Alternative Reading of the Sceptical Paradox

Kripke, when introducing the ground rules for formulating the problem, only presupposes

[41] Compare Ebbs 1997 where such a strategy is explored independently of Wilson's proposal. I cannot go into this here.

semantic correctness to play a role for the defendant.[42] The sceptic thus attacks one general idea and the candidate facts are adduced to demonstrate how that general idea can be concretised. But those concretisations, on which commentators often draw, are not to be projected back into the general notion of semantic correctness.

The correct use of words depends on there being a rule (or a meaning) and a language user whose intention to follow the rule (or whose grasping of the appropriate meaning) determines indefinitely many cases of semantically correct language use. That is the conception of semantic correctness at stake. The terms 'rule', 'intention' and 'determine' can be spelled out in different ways, as the 8 candidate facts show. Some of the different ways of spelling out those terms may be mutually exclusive—but that does not play a role. What does play a role is that any opponent of the sceptic and the sceptic himself are committed to what has been called 'grasping as extrapolating'. Once a rule is grasped, an indefinite number of semantically correct language uses are determined.

One recent commentator who is led astray by mixing various passages from Kripke's book is Martin Kusch. Instead of taking semantic correctness as it stands as the starting point of his interpretation, Kusch defines an alternative target of the sceptical challenge—he calls it 'low-brown meaning determinism'. Low-brow meaning determinism is defined as follows:

> 'Person *x* means *Y* by sign '*z*'' is true if, and only if, *x* has a certain mental state (MS) that *constitutes x*'s meaning *Y* by '*z*'.[43]

Bound up with low-brow meaning determinism are commitments to three ideas which deserve special mention:

- a speaker's mental state that constitutes the meaning of an expression is an intrinsic state that the speaker knows immediately and certainly
- the meaning of a declarative sentence is the proposition it expresses; the proposition has truth-conditions which fully characterise it, as it *corresponds* to an obtaining fact if it is true
- the justification of meaningful language use must come from *ontological* considerations[44]

There are two main problems with this interpretation of the sceptic's target.[45] First, the sceptical scenario need not be formulated in terms of truth—Kripke's own formulation and the one given above do not involve truth. Second, the sceptic's interlocutor is not necessarily committed to the idea that some mental state constitutes meaning. Evidence for this is readily

[42] Kripke 1982:11-12
[43] Kusch 2006:11-12
[44] Ibid.
[45] There are also many small problems with this interpretation. I shall not mention them in particular, as they have parallels in Wilson's and Hattiangadi's misreadings.

available. Behaviourism, a proposal Kripke mentions explicitly at several places, is not committed to the proposition that the intention to follow a rule involves being in a certain constitutive mental state; nevertheless, behaviourist ways of fleshing out semantic correctness are also subject to sceptical doubts. Sceptical doubts apply to behaviourist proposals, not because they are committed to the idea that a certain mental state constitutes meaning, but because they are committed to the idea that an intention or meaning determines an indefinite number of meaningful language uses, construed as behaviours. If the appropriate behaviours are not forthcoming, the relevant intention or meaning cannot be ascribed to the rule-follower or language user. This shows that Kusch's reading of the scenario is too complicated and that he misses the general character of what is at stake as well. Instead of semantic correctness, Kusch suggests that the sceptical challenge is about attitudinal correctness, i.e. about how mental states govern language use.

Furthermore, it emerges as bitter irony that Kusch objects to other commentators that they read the sceptic's interlocutor as being committed to interpretationalism—the idea that grasping a rule means interpreting a rule.[46] Sure, they do claim (albeit in different terms) that the sceptic's interlocutor is committed to the idea that some specific mental state constitutes grasping a rule. But that is something that Kusch is also committed to with his low-brow meaning determinism. This is, of course, a pernicious inconsistency affecting the tenability of Kusch's construal of the primary target. After all, Kusch's low-brow meaning determinism is a more general version of interpretationalism, because it is merely concerned with attitudinal correctness instead of semantic correctness *tout court*.

This ends the discussion of the sceptical paradox. We have considered how the sceptical conclusion is established, what possible objections to it Kripke considers, what role normativity and dispositions play, and how Wilson and Kusch misread Kripke's scenario. With these issues settled, we can move on to discussing Kripke's sceptical solution.

1.2) The Sceptical Solution

Various strategies for dealing with the sceptic have been discussed so far, but all of them fail and it is not clear how they can be amended without conceding anything to the sceptic. Most proposals either miss what the sceptical challenge is about or they move towards a sort of primitivism which cannot explain the central *explanandum* at stake in the scenario. The central *explanandum* is that we extrapolate semantically correct uses of language in an

[46] See Kusch 2006:201-5/219-28 where he attacks McDowell 1984 and Baker & Hacker 1984c.

indefinite number of cases, which we have not encountered previously. And if we focus on concepts and their applications, we perceive an analogous problem: how come that we extrapolate correct applications of concepts in an indefinite number of cases which we have not encountered previously? The *explanandum* has been dubbed 'grasping as extrapolating', as it questions how grasping or remembering anything finite—a concept, the meaning of a linguistic expression, a rule or a set of previously correct language uses, or something more elusive—can constitute and warrant extrapolating an indefinite number of correct actions, beliefs or language uses. The primitivist does not answer this question, he even rejects it, because he insists that we simply do extrapolate correctly. Kripkenstein's sceptic, on the other hand, forces us to recognise the importance of the question and shows that answers are not easy to come by.

It has been conceded to the sceptic that grasping as extrapolating must be explained. Can we concede more to him? It seems so, because all the answers to the sceptic considered so far attempted to completely eradicate scepticism about how grasping as extrapolating is possible. But we might hold that it is useful to allow scepticism about grasping as extrapolating for *some cases* and that we should therefore not attempt to come up with an *a priori* argument against these sceptical doubts. After all, most rules have exceptions and we should sometimes want to question whether somebody really follows a rule if he or she does not know a relevant exception. Scepticism about grasping as extrapolating is sometimes demanded in everyday life.

As I have already mentioned above, an alternative strategy against the sceptic involves shifting the burden of proof onto him. We may agree that *a priori* arguments lead nowhere, but still we may invite the sceptic to show why the particular case of language use he doubts to be correct is actually incorrect. After all, it is natural to assume that a normal speaker is authoritative about what she means by the words she chooses. It is likewise natural to assume that peoples' claims about which concepts they apply in their judgements are correct, unless something is seriously wrong with the claimant's psychology. The sceptic has done nothing to show that such avowals—here construed as self-ascriptions of concept-possession, meaning, rule-following and intention—are incorrect; he merely held that it is conceivable that they are so.

While all of this might indeed be enough to parry sceptical doubts about the correctness of avowals in most circumstances, a caveat must be added. We may not content ourselves with simply shifting the burden of proof to the sceptic. That in itself is not helpful, because it does not explain grasping as extrapolating. In order to account for semantic

correctness, more has to be said about how extrapolations are effected. This is, with sceptical doubts about meaningful language use lurking in the background, not a straightforward matter. The only hint we have so far is the observation that the sceptic did not rule out that avowals are usually not incorrect. Do we have to explain grasping as extrapolating in terms of exclusion, i.e. by what is not incorrect?

In Kripke's book we find a so-called sceptical solution to the sceptical paradox. It will be argued below that this solution must be understood as an attempt to give an exclusionist account of grasping as extrapolating. It will, however, also be argued that this exclusionist account fails. This then raises the question whether an alternative account of grasping as extrapolating is possible and that will then be affirmed.

Kripkenstein meets Berkeley and Hume

In order to introduce his reading of Wittgenstein's own reaction to the sceptical paradox, Kripke suggests parallels with Berkeley and Hume. For the sake of brevity, I shall neglect considering whether Kripke's discussion of Berkeley and Hume are exegetically adequate.

The Berkeleyan claim Kripke compares with his Wittgenstein's is the denial of matter.[47] It might seem at first as if that claim runs counter to common belief, but for Berkeley, Kripke argues, the affirmation that there is matter derives from 'an erroneous metaphysical interpretation of common talk'. Philosophers misconstrue common language use, because they take it too literally and read a commitment to external matter into it.

According to Kripke, Wittgenstein proposes a similar reaction to the idea that we need a fact which constitutes and justifies meaning addition by 'plus'. He concedes that it is natural to think that our ordinary concept of meaning demands such a fact, but it is nevertheless a philosophical misconstrual of common language use, just as in Berkeley's case. Kripkenstein's Berkeleyan proposal therefore has it that the search for a metaphysical foundation of semantic correctness (and other cases of correct extrapolation) is misconceived.[48]

This parallel between Kripkenstein and Berkeley does not help much, if it is not spelled out properly. Kripke decides to spell it out in terms of rules and writes that it is essential to our concept of a rule that we somehow construe it as containing a conditional. Let

[47] Kripke 1982:65-65 and Berkeley 1999: §§29-34.
[48] McNally & McNally 2012 correctly argue that the idea that there is no fact which forces a particular use of an expression or an application of a concept onto us can be found in Wittgenstein PI §140 and RFM I:§118.

us call this the '*modus ponens* model' of rule following:[49]

Rule: If *A*+ is the case, φ.[50]

Premise: *A*+ is the case.

Conclusion: φ.

For Kripkenstein, *A*+ in the premises contains a set of criteria and if (depending on how these criteria are related) one or several of them are fulfilled, the rule is followed. This is evident from how Kripke discusses criteria.[51] φ can be thought of as specific actions or behaviours, but it can also include the formation of intentions, beliefs or other mental states. Last but not least, φ refers to correct language use in situations not encountered previously. So, if Joanna knows that polar bears are white and fluffy bears, which have black noses and sharp teeth and if she applies this knowledge to call any polar bear 'polar bear', then she can refer to polar bears with the name 'polar bear'. Now, the criteria Joanna uses are (at least together) sufficient, but not all of them need be necessary. Nevertheless, these criteria are enough for her purposes. So, she follows a rule for correctly naming polar bears.

It is assumed that a straightforward reading of rule-following along these lines invites asking for a metaphysical foundation of *A*+. An alternative picture of rule-following, which is also a *modus ponens* model of sorts, is then proposed to undermine metaphysical musings along the lines Berkeley had suggested. The allegedly crucial point of the Berkeleyan suggestion and Kripkenstein's reaction to the sceptic is that the conditional embedded in the rule is to be inverted.[52] While an ordinary rule determines what counts as correct, an inverted rule determines what counts as incorrect. Ordinary rules employ criteria of correctness and inverted rules employ only defeasibility-criteria, which are criteria with which one can identify what counts as incorrect. So, Kripkenstein's proposal forges together Berkeley's metaphysical anti-foundationalism and some sort of exclusionist approach to correctness—i.e. an approach which has as a leitmotif that the sceptic cannot claim that '125' is not the correct answer to '57+68=?', because no defeasibility-criteria that can be used to identify incorrect language use have been met. An example should make this clearer. Ordinarily, we would expect a rule like

Ordinary Rule: An arbitrary speaker *S* means addition by '+' if he answers '125' to the question '57+68=?'.

Such rules are seen as open to the sceptic's attack, because they determine correctness and

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[49] Kripke 1982:94, see also Wright 2007.
[50] The rule should, for present purposes, be read as determining what counts as φ-ing and not as prescribing anything.
[51] Kripke 1982:100
[52] Op. cit. p. 94

suggest that there is a fact of the matter—namely answering '125' to the question '57+68=?'––which constitutes such a determination. Kripkenstein's solution is centrally based on an inversion (i.e. a contraposition) of the rule that replaces it

> **Inverted Rule:** If an arbitrary speaker *S* does not answer '125' when asked '57+68=?', *S* cannot be said to mean addition by 'plus'.

There is no general form of inverted rules in Kripke's text, but letting *A*- stand for a set of defeasibility-criteria and *S* for an arbitrary speaker, one might stipulate

> **General Inverted Rule:** If *A*- is the case, *S* cannot be said to φ.

This proposal is a form of exclusionism, according to which language users just use the languages and get corrected if they do not comply with the rule. The relevant criteria in *A*- are defeasibility-criteria, which, if only one of them obtains, warrant a falsification of statements ascribing meaning, intention, mental states or concept-possession to people in particular cases.[53]

Exlusionists suggest that ordinary rules be replaced by inverted rules and that any verification of a claim about correct language use be replaced by the falsification of a corresponding claim about incorrect language use. So if, for example, *S* is hallucinating in the desert and claims that he knows that there is water in front of him, we cannot say of him that he correctly claims that there is water in front of him and we cannot say either that he knows that there is water in front of him. In such a case, *S*'s self-ascription of knowledge does not hold and we can formulate a rule, which excludes such claims as incorrect:

> If an arbitrary speaker *S* is hallucinating in the desert, *S* cannot be said to know that there is water in front of him or her.

The upshot of this exclusionist strategy is clear: language users are justified in saying what they say if nobody objects and that justification does not require metaphysical foundations.

If every member of a community is in principle allowed to falsify claims about language use based on such inverted rules, rule following and concept-possession in general, we obtain the following picture for the conditional embedded in the general inverted rule:

> The rough conditional thus expresses a restriction on the community's game of attributing to one of its members the grasping of a certain concept: if the individual in question no longer conforms to what the community would do in these circumstances, the community can no longer attribute the concept to him. Even though, when we play this game and attribute concepts to individuals, we depict no special 'state' of their

[53] The Indian philosophers Dignāga and Dharmakīrti have founded an influential school based on an exclusionist account of concepts which is strikingly similar to this. Issues surrounding this account are discussed in Siderits, Tillemanns & Chakrabarti 2012. The parallel with Kripkenstein's solution has, as far as I know, not been explored yet.

> minds, we do something of importance. We take them provisionally into the community, as long as further deviant behavior does not exclude them. In practice, such deviant behavior rarely occurs.[54]

One may, however, protest that this sort of exclusionism is misleading or even downright wrong. A possible reason for such an objection draws on Kripkenstein's rejection of the candidate fact that the hypothesis that S meant addition by '+' is the simplest such hypothesis. As we have seen, Kripke has argued that any viable notion of hypothesis is blocked by the sceptic and it seems to entail that we cannot simply help ourselves to falsifiable hypotheses in the sceptical solution:

> The sceptic argues that there is no fact as to what I meant, whether plus or quus. Now simplicity considerations can help us decide between competing hypotheses, but they obviously can never tell us what the competing hypotheses are. If we do not understand what two hypotheses *state*, what does it mean to say that one is 'more probable' because it is 'simpler'? If the two competing hypotheses are not genuine hypotheses, not assertions of genuine matters of fact, no 'simplicity' considerations will make them so.[55]

There is, however, a difference between understanding a falsifiable hypothesis and understanding a verifiable hypothesis, because only verifiable hypotheses required 'asserting genuine matters of fact' to mean that some definite matters of fact are pointed out. Falsifiable hypotheses, on the other hand, assert by excluding what cannot count as such—they need not point out anything definite (i.e. a metaphysical basis), which can be referred to in order to answer the sceptical challenge.

Furthermore, Kripkenstein cannot rule out that hypotheses are available right from the beginning of his sceptic's challenge, it is only after his sceptical doubts have warranted the sceptical conclusion that hypotheses may count as meaningless. The point of the solution just presented is, however, that self-ascriptions of meaning (qua falsifiable hypotheses) are subject to inverted rules, which determine incorrect language use, and for such self-ascriptions the sceptical conclusion does not hold.[56]

Therefore, the exclusionist strategy which plays on the idea that there are inverted rules, which determine what counts as incorrect language use (and thus form a basis for falsifying ascriptions of meaning, rule-following and concept-possession), is probably innocuous. It is, however, possible that introducing inverted rules is not necessary in order to pursue an anti-metaphysical agenda. Orthodox Wittgensteinians endorse an anti-metaphysical

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[54] Op. cit. p. 95
[55] Op. cit. p. 38
[56] Crispin Wright mentions this reason why we can indeed help ourselves to a notion of hypothesis and why the sceptic cannot effectively argue against such a move on our part; see his 2001:109, footnote 6.

agenda, but do not propose any sort of inverted rules. Instead, they argue for the more elegant proposition that the rules have defeasibility-criteria without committing themselves to the *modus ponens* model of rule-following.[57] I shall discuss this view below in more detail. Let us now turn to the Humean portion of Kripkenstein's reaction to his sceptic's doubts.

Hume has in his *Enquiry* a chapter containing 'sceptical doubts concerning human understanding' and offers a 'sceptical solution to these doubts' in the chapter following it. Kripke distinguishes, inspired by Hume, between two kinds of solutions to sceptical paradoxa.[58] Straight solutions give reasons to dismiss a sceptical challenge by providing arguments which establish the thesis the sceptic doubted. In a strict manner of speaking, straight solutions are the only responses, which can be said to answer sceptical doubts. On the other side, there are sceptical solutions. Sceptical solutions concede to the sceptic that her doubts are unanswerable. Note that sceptical solutions do not concede to the sceptic that merely some doubts are unanswerable while others are unwarranted—that sort of cherry picking is not allowed. But, Kripke writes, what sceptical solutions may involve is, as in the case of inverted rules,

> a sceptical analysis or account of ordinary beliefs to rebut their *prima facie* reference to a metaphysical absurdity.[59]

This is also how Kripke reads Hume's basic idea. He reads Hume as holding that common sense provides us with ways of using language and that it also provides some basic beliefs, which we must take for granted. Hume is also read as rejecting that reference to something metaphysical is to secure this.[60]

What matters at the moment is Kripke's construal of Hume's treatment of causality, because it provides us with an analogy with which Kripkenstein's sceptical solution can be understood. The crucial passage in Kripke's text is the following one:

> Only when the particular events *a* and *b* are thought of as subsumed under two respective event types, *A* and *B*, which are related by a generalization that *all* events of type *A* are followed by events of type *B*, can *a* be said to 'cause' *b*. When the events *a* and *b* are considered by themselves alone, no causal notions are applicable. This Humean conclusion might be called: the impossibility of private causation.[61]

Similarly, Kripke writes, we must not consider *S* in 'An arbitrary speaker *S* means addition by '+' ' (i.e. the antecedent of the ordinary rule) in social isolation, for language users must in

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[57] Cf. Baker & Hacker 1984c: 110ff.
[58] Kripke 1982:66-67
[59] Ibid.
[60] Kripke cites Hume's 1888:124/187. This reading of Hume has been contested by Blackburn 1984:§1 and Baker & Hacker 1984c:7-9. I shall abstain from trying to defend Kripke.
[61] Kripke 1982:67

principle remain open to other people's criticisms.[62] We, it seems, need adequate criteria in the antecedent (i.e. *A+* in the ordinary rule) to license one or several actions or intentional states (i.e. ***φ*** in the ordinary rule). Now, the sceptical paradox shows us that such adequate criteria cannot be had for ordinary rules in accord with the *modus ponens* model. Ordinary rules are dismissed by the sceptical conclusion, but inverted rules are allegedly in order, for they do not require any specific fact of the matter to ground semantic correctness. Understanding the role of rules in semantic correctness (along the lines exemplified by the general inverted rule) is thought to do away with the issue. Furthermore, inverted rules make it possible for other members of a community to falsify claims to correct language use or to correct ascriptions of concept-possession. The rule-follower in question, so the proposal goes, must hence not be considered in social isolation if an account of what warrants his rule-following is to be given at all.

According to Kripke, Wittgenstein proposes to flesh out the defeasibility-criteria for inverted rules through answering two questions:

(i) Under what conditions may this form of words be appropriately asserted (or denied)?

(ii) What is the purpose in our lives of our practice of asserting (or denying) the form of words under these conditions?[63]

The specification of the set of defeasibility-criteria (i.e. *A-* for inverted rules) states under what conditions an individual's behaviour cannot be said to be in accord with the answers to (i) and (ii). Individuals use language as they please, unless somebody else disputes the correctness of their language use based on a rule, because words have (evidently) been applied incorrectly or no purpose of using some words in a specific way obtains. And although Kripke focuses on assertion here, we can readily reformulate this for other speech acts. But not only other speech acts are concerned. The general point is about ascribing the possession of concepts and about how members of a community agree in how they do it:

> The entire "game" we have described—that the community attributes a concept to an individual so long as he exhibits sufficient conformity, under test circumstances, to the behavior of the community—would lose its points outside a community that generally agrees in its practices.[64]

The role of the community and the importance of the sort of agreement we find in the game of concept-ascription become fully clear if we consider Kripkenstein's Private Language Argument, which is supposed to follow from this.

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[62] Op. cit. pp. 68-69 and 110
[63] Op. cit. p. 73
[64] Op. cit. p. 96

Kripkenstein's Private Language Argument

Recall that, in analogy with what he called 'private causation' when discussing Hume, Kripke considers a private model of language use to consist of focusing on *S* in 'An arbitrary speaker *S* means addition by '+' ' in isolation. He does not argue against the idea that physically isolated individuals can follow rules, he argues against the idea that an individual considered in isolation can be said to follow rules. An individual in isolation cannot, so the idea goes, by herself settle correct rule-following and because rule-following must always be correct or incorrect, individuals cannot be said to follow rules at all. That is, obviously, a form of communitarianism, where the community ultimately and exclusively determines matters of correctness. But it is not clear what, in detail, leads Kripkenstein to this view. The issue becomes even more pressing if we ask why the community, taken as a unity, is immune to worries appertaining to individual language users considered in isolation.[65]

The summary Kripke gives of the private language argument features 6 elements, all of which we have already seen in the preceding sections above.[66] It is thus also a good summary of the sceptical paradox *cum* sceptical solution.

(1) The first element of the argument is semantic correctness as defined at the beginning of the discussion of the sceptical paradox. It is Kripke's default conception of language use, according to which the meaningful use of a word depends on there being a rule which determines indefinitely many cases of correct language uses.

(2) The second element of the argument is that the sceptical paradox doubts semantic correctness in a way which makes the prospect of ever finding a straight solution look bleak. Only a sceptical solution can be had and that means reassessing our ordinary language use concerning (i) how we actually assert that an arbitrary individual is actually following a rule and (ii) how we actually use conditional assertions of the form 'if an individual follows such-and-such a rule, he must do so-and-so on a given occasion'. In other words, we 'must look at the circumstances under which these assertions are introduced into discourse, and their role and utility in our lives'.[67]

(3) If we consider individual rule-followers in isolation, we cannot fully consider (ii). It remains unexplained on what basis such conditionals can be justified.

(4) The picture changes—and (i) and (ii) can be adequately reassessed—if we consider

[65] See Blackburn 1984 and Glock 1996 (entry on privacy) for this worry.
[66] Op. cit. pp. 107-109
[67] Loc. cit.

that individuals partake in communities. In particular, we gain an explanation of how justification works in the case of (ii): 'When the community accepts a particular conditional (ii), it accepts its *contraposed* form: the failure of an individual to come up with the particular responses the community regards as right leads the community to suppose that he is not following the rule'.[68]

(5) The acceptability of any individual rule-follower's claims thus depends on whether any other member of the community disputes the correctness of these claims based on a relevant conditional. Kripke speaks of agreement if any such disputation is absent and emphasises that the sceptical conclusion prevents us from claiming that acceptability or agreement can be explained in terms of a fact that the members of the relevant community grasp the same concepts.

(6) (2) and (3) show that a private model of language use or rule-following is impossible and (4) and (5) show that a communal model of both is possible.

All of these 6 elements of Kripkenstein's private language argument have been challenged during the last 30 years. And whereas the purposes of the presentation so far have prevented most critical remarks, we can now start considering objections to Kripkenstein's solution. The main problem is simply that Kripkenstein has not effectively shown why we should suppose that a community (as a unity) is not subject to the same worries as individuals (possibly in isolation) are.[69] If this worry cannot be answered, the Humean portion of the sceptical solution falls flat and the only good ideas of the solution are the metaphysical anti-foundationalism and the idea that defeasibility-criteria play a special role, which are the two central ideas of the Berkeleyan portion.

In what follows, I shall build on a different objection. The objection is that Kripkenstein's communitarianism does not provide an adequate notion of objectivity, because it neglects a basic observation on how the truth-predicate is used.

1.3) Objectivity

How the Humean Consideration Fails

The idea that Kripkenstein is committed to a deflated conception of truth is uncontroversial. Kripke writes that Wittgenstein accepts a redundancy theory of truth and that this commits him to hold that '*P*' is true if and only if *P* is the case.[70]

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[68] Loc. cit.
[69] Cf. Blackburn 1984 and Glock 1996:309-15
[70] Kripke 1982:86

We have also seen that the central tenet of Kripkenstein's Humean consideration is that semantic correctness is to be explained in terms of conditions under which members of a community are justified in asserting a claim as correct or as incorrect. It immediately follows from this that the Humean consideration commits Kripkenstein's sceptical solution to conflating truth-conditions and assertion-conditions. That conflation is, however, a gallows rope for the entire proposal.

From '"*P*" is true if and only if *P* is the case' we can easily derive a negative statement type which runs as follows:

(1) 'It is not the case that *P*' is true if and only if it is not the case that '*P*' is true

Now, if '*P*' is true, we are justified to say so. Otherwise, we would not get a conception of meaning which meets Kripke's standards. Thus, based on Kripkenstein's Humean considerations, substituting 'is true' for 'is warrantedly assertible' should yield a statement type which is coextensive with (1):

(2) 'It is not the case that *P*' is warrantedly assertible if and only if it is not the case that '*P*' is warrantedly assertible.

But (2) is not coextensive with (1), as it fails if read right-to-left. Consider an example to make this clear. When I am in a dark alley in the middle of the night and I see something moving in front of me, it might not be the case that 'there is a rat' is warrantedly assertible (for it may be a mouse or a cat). But this does not necessarily entail that 'it is not the case that there is a rat' be warrantedly assertible. On the other hand, 'there is a rat' being false does indeed entail that 'it is not the case that there is a rat' is true. Applied to this example, the biconditional (2) is invalid while (1) is valid. This simply means that the Humean consideration makes the original sceptical solution inconsistent.[71]

From this we must conclude that the extension of the truth predicate (viz. 'is true') can diverge from the extension of the warranted-assertibility predicate (viz. 'is warrantedly assertible'). The possible divergence between the extensions of the two predicates does not only appear on the level of the individual, but also on the level of the community. So it emerges that the truth predicate can be used to mark semantically correct language use which warranted assertibility cannot capture. This means that if anything like the sceptical solution is to pass muster, the original Humean considerations must be superseded by an alternative conception of objectivity. This amounts to forfeiting Kripkenstein's communitarianism and to retaining a notion of truth, which is at the same time deflationary and substantial. The notion is deflationary, because we still subscribe to the disquotation principle "'*P*' is true if and only

[71] The original argument stems from Wright 1992:ch.1, but he does not apply it to counter the Humean portion of the sceptical solution.

if *P* is the case"; and the notion is substantial, because the extension of the truth predicate may diverge from the extension of the warranted-assertibility predicate.

From Objective Judgements to Objective Claims

In order to forge an alternative sceptical solution, we only have the Berkeleyan considerations of Kripkenstein's proposal and the corollary that truth can diverge from warranted assertibility. Can a suitable conception of objectively correct language use spring from this? And if it can, will that conception help explaining grasping as extrapolating?

Recall that, according to the Berkeleyan considerations, self-ascriptions of meaning and intention are said to have defeasibility-criteria. These defeasibility-criteria determine the circumstances under which self-ascriptions of meaning and intention are incorrect. If the criteria are not fulfilled, a speaker's self-ascriptions count as true—and therefore also as warrantedly assertible—by default.[72] For such cases, the rules for language use—to which the defeasibility criteria belong—need not be cited by competent users of the relevant language. So the truth of self-ascriptions of meaning and intention does, in most cases, not require any further justification or buttressing to count as objectively true. But is there a way to explain this more precisely?[73]

A first idea that one might come up with focuses on how we extrapolate. After all, the sceptic got his challenge off the ground by questioning the possibility of new correct extrapolations from a finite set of semantically correct language uses. So, when I extrapolate a new application of the term '+' in order to answer a new arithmetical problem like '57+68=?' and the sceptic questions whether '125' is the correct solution based on what I mean by '+', the judgement that I mean addition by '+' cannot be called into doubt by the sceptic if ordinary circumstances prevail. The judgement that I mean addition (and not quaddition) by '+' cannot be called into question unless some relevant defeasibility-condition has actually been breached. I must, in other words, not be subject to self-deception (maybe due to peer-pressure or due to cognitive problems of a relevant sort). Note that assessments of whether I am deceiving myself are, to boot, positive-presumptive, i.e.

> one is entitled to assume that a subject is *not* materially self-deceived, or unmotivately

[72] Recall the result of the previous section: warranted assertibility can be derived from truth, but truth may not always be derived from warranted assertibility.

[73] This question obviously follows the spirit of Crispin Wright's take on the issue when he asked in his 1989a:114: 'How is it possible to be effortlessly, non-inferentially, and generally reliably authoritative about psychological states which have no distinctive occurrent phenomenology and which have to answer, after the fashion of dispositions, to what one says and does in situations so far unconsidered?'

similarly afflicted, unless one possesses determinate evidence to the contrary.[74]

A first problem with this proposal is that my judgement that I mean addition by '+' in new cases cannot constitute an extrapolation from correct uses of '+', because it presupposes the extrapolation. We can judge that an extrapolation is correct (or not) only if there already is an extrapolation for which the question of correctness can arise. So the proposal requires that extrapolations be constituted independently of the judgement and appealing to judgements alone cannot settle the issue.[75]

A second problem consists in the fact that we *can* explain the positive-presumptive status of claims with which speakers self-ascribe meaning and intention in most normal cases and without having to adduce a specific notion of judgement. I am entitled to believe anything somebody tells me about what she means or intends (or about the concepts she possesses) if there is no determinate evidence to the contrary. This need not have anything to do with positive-presumptive judgements, but is simply a fact about communication. It is, on such a view, an *a priori* constraint on communication, of which self-ascriptions of meaning and intention are instances. (This presupposes, of course, that ascribers and avowers should have little use in ascriptions and avowals which are never uttered or, when tacit, never influence actions.)[76]

So, extrapolations are probably not entirely judgement-dependent. There are, however, also some pitfalls when we bring in facts about communication as an alternative. It is facile to think that self-ascriptions of meaning and intention are instances of the same fact about communication. More subtle differences between the two kinds of self-ascription can be perceived if we focus on the internal relations between meaning and intending on the one hand and what counts as doing so on the other. So, the assumption we want to test is that self-ascriptions of intention and meaning are perfectly analogous, because the fact about communication determining how they are ascribed is basically the same.

Consider two unique twins who have been brought up together, went to the same schools and always spend their time together. We can assume that these twins use language in almost the same way, we can also assume that they understand very well what the other means by what she says on specific occasions when both are present.

Now, imagine two different situations. In the first, one twin bakes a cake for her

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[74] Wright 1989b:137 who defends a judgement-based proposal along the lines described here.
[75] This is the standard objections to such proposals. Cf. Boghossina 1989b:§§29-30 and Hattiangadi 2007:158-161
[76] Donald Davidson (1980) has argued that this fact is the very basis for interpreting what other people say.

mother's birthday and takes eggs out of the fridge. The other twin enters the room and asks her why she is doing that. The first twin replies: 'Because I want to bake a cake for mum's birthday.' She thus self-ascribes the intention to bake a cake for her mother's birthday.

In the second situation, one twin asks for the sugar pot lying next to the flour by saying: 'Pass me the pot next to the flour, please'. The other twin enters the room and asks her what she means. The first twin replies: 'I need sugar and I meant the sugar pot when I asked you to pass me the pot next to the flour'. She thus self-ascribes meaning the sugar pot by 'the pot next to the flour'.

The strong analogy one might be inclined to draw between intention and meaning breaks down if we consider whether the self-ascriptions entail something specific about what counts as a semantically correct extrapolation. On the one hand, carrying out a series of actions according to an intention can only be distributed over several individuals if that is part of the intention, i.e. if the intention is one to act jointly. The first twin might want to bake the cake herself and it may run counter to her intention that the second twin helps—on that reading the first twin's intention disables the possibility that the second twin helps actualising the intention. On the other hand, saying something in accord with a particular meaning can always be distributed over several individuals—competent users of a language understand an expression in the same way; if this was not the case, one could hardly make sense of a shared understanding of language at all. So it appears that self-ascriptions of meaning do entail something about what counts as a semantically correct extrapolation for any competent speaker of the same language, whereas self-ascriptions of intention do not necessarily have that upshot.

One might object to this that it should be likely that one twin can sincerely mean something particular by saying 'the pot next to the flour' without it ever having to be understandable by the second twin (or anybody else). But such an objection runs counter to the natural contention that there must be a difference between that twin using language correctly and merely seeming to use language correctly, because correctness in this case is solely determined by what the first twin means. Such a conception of meaning—that one twin can sincerely mean something particular by an expression without it ever having to understandable by anybody else—would surely be nonsense, as it jeopardises a perfectly natural view of objectivity in language use.

Nevertheless, we must add a caveat here. The assumption that self-ascriptions can be understood along the lines just presented is controversial. It assumes that an intention and what satisfies it are internally connected, just as a meaning of a word and its use, a rule and

what counts as following it and concepts and what counts as possessing them. That may be perfectly intelligible from a Wittgensteinian point of view. But it remains to be shown that internal relations can be used to fully characterise semantically correct extrapolations and that epistemological factors—regulating correct belief-formation independently of meaning—or factual considerations—adducing some allegedly extra-linguistic facts—are not necessary for semantically correct extrapolations. This is why the status of factual and epistemological correctness for extrapolations in language use still remains to be clarified.

2) The Rule-Following Debate

The literature commenting on Kripke's book is vast. But the reading of the sceptical paradox and of Kripkenstein's solution introduced above warrants neglecting many contributions to the debates. I shall, in the remainder of this first part of the present thesis, address three further questions:

1) To what extend is my alternative sceptical solution a Wittgensteinian proposal?
2) How do orthodox Wittgensteinians understand the sceptical paradox and can they explain grasping as extrapolating?
3) Are there responses to the sceptical challenge which explain language use (at least in part) through factual correctness and what are the prospects of such responses?

Below, I shall first discuss the contributions by Gordon Baker and Peter Hacker. This responds to questions 1 and 2. It will emerge that, concerning question 1, my alternative take on a sceptical solution is a heterodox Wittgensteinian proposal. And I shall argue that, concerning question 2, all Wittgensteinians must yet find a way to fully explain grasping as extrapolating.

As an answer to question 3, I shall introduce the proposals by Paul Boghossian and Anandi Hattiangadi, who argue that correct language use can be explained in terms of truth- or correctness-conditions which anchor meaning in a factual basis that is (at least in principle) independent of human thought and talk. Such proposals are usually labelled 'semantic realism' and they are the most important and interesting alternatives to Wittgensteinian approaches to language and mind.

At the end of part A, when the three question will have been addressed, we will have established the topics for the remainder of the thesis: in part B, the issues between Wittgensteinians and the semantic realists are to be settled; in part C, an account of linguistic competence is to be given which explains grasping as extrapolating.

2.1) Wittgensteinian Views

Was Wittgenstein an Exclusionist?

Kripkenstein's sceptical solution is an exclusionist proposal: language users are justified in saying what they say if nobody objects and such justifications do not require metaphysical foundations. Every member of a community is in principle allowed to falsify claims about language use, rule following and concept-possession in general once appropriate defeasibility-criteria are met. So, the sceptical solution employs a form of falsificationism about such claims. It is an interesting question whether Wittgenstein himself puts the concept of falsification to a similar use and contrasts it with verification just like Kripkenstein does.

At a first glance, there is not much in Wittgenstein which suggests that he thinks that (at least sometimes) falsification enjoys priority over verification. Running searches in the electronic edition of the *Bergen Nachlass* for 'falsification', its cognates and the German 'Falsifikation' (plus cognates) yields only few results. Most of them appear in discussions about probability and prediction (e.g. TSS 215A:6, 215b:16, 209:132, 211:640, 211:660), expectations (TS 209:4, MS 108:59) or—most important for present purposes—extrapolations into infinity (MS 133:77-8, TSS 211:660, 211:637-8, 215a:4-5, 215b:16). It is most significant that Wittgenstein only distinguishes falsification from verification when he discusses extrapolations of some sort. In all other examples, no such distinction is made.

The distinction is made when it comes to extrapolations because, as Wittgenstein argues in these passages, it is possible to falsify statements about extrapolations into infinity whereas it is impossible to verify them. He mentions three examples in particular. The first is the statement that there is no end to the integers succeeding 1 in the series of natural numbers (TSS 215b:16, 211:660). The second is the statement that there is an infinitely long row of trees (MS 133:77-8, TSS 211:637-8, 215a:4-5) and the third (obtained from the same passages) is the law of inertia, which says that an object continues a movement in a straight line infinitely if friction and other interferences are absent. All three statements are found falsifiable but not verifiable. It is therefore exegetically warranted to infer that the semantic correctness of the extrapolations in these examples is, according to Wittgenstein, to be characterised in exclusionist terms. The passages do, however, not support Kripkenstein's claim that all understanding must be explained in exclusionist terms.

This evidence for how Wittgenstein discusses extrapolations into infinity is an important finding, because the sceptical solution is footed on the idea that only an exclusionist

explanation can handle extrapolations from a set of finite examples to indefinitely many new cases. Wittgenstein's point about extrapolations does not necessarily require that understanding be construed in terms of exclusion. But it shows that defeasibility-criteria play an important role for at least some extrapolations: some claims can only count as correct, if it cannot be shown that they are incorrect. And for those extrapolations, understanding may indeed be construed in terms of exclusion. No positive criteria can allow a verification of such claims' correctness—there are only defeasibility-criteria which settle what counts as a falsification of such claims' correctness. And Wittgenstein's point here is that defeasibility-criteria can indeed play a special role when it comes to extrapolations and we can easily extend the idea to what understanding claims about the infinite come to by holding that such cases are best explained in exclusionist terms.

So, that should suffice to support the idea that at least part of the so-called Berkeleyan portion of Kripkenstein's sceptical solution is—at least with a small pinch of salt—genuinely Wittgensteinian. Whether the anti-metaphysical attitude of the sceptical paradox is also genuinely Wittgensteinian will be assessed in the next section.

Baker & Hacker on Kripkenstein

The most detailed discussion of Kripkestein from an orthodox Wittgensteinian point of view is *Scepticism, Rules & Language* by Gordon Baker and Peter Hacker. But it is the recent publication of an extensively revised edition of their *Wittgenstein. Rules, Grammar and Necessity. Volume 2 of An Analytic Commentary on the Philosophical Investigations* which presents a more definitive assessment of the topics surrounding Kripke's book. Due to the restricted scope of the present thesis, I shall concentrate on systematic issues and consider exegetical ones only insofar as the systematic ones demand it.

Baker & Hacker's *Scepticism, Rules & Language* is arguably also the first monograph which offers an adequate discussion of Kripke's book. Its main purpose is to distinguish Kripkenstein from the historical Wittgenstein. The evidence they offer has probably encouraged subsequent commentators (e.g. Boghossian 1989a and Hattiangadi 2007) to neglect Wittgenstein's contributions to the issue. Only recent works by Hans-Johann Glock and Martin Kusch have turned the tide and now provide a basis for a reassessment of what ideas Kripkenstein and Wittgenstein share about critical issues of contemporary systematic philosophy.[77] Baker & Hacker's contributions to systematic aspects of rule-following have,

[77] I shall say more about Glock's views below. Kusch (2006: ch. 8) provides an extensive list of objections

however, often been neglected in the debate. And where they have not been neglected, they have been misread. In what comes below, I shall focus on explaining how certain contributors misconstrue central aspects of Baker & Hacker's account and it will be shown that the sceptical paradox can be used as an argument for a perfectly Wittgensteinian point. The only grave shortcoming of Baker & Hacker's account will turn out to be that they missed the chance to enlist an important ally.

Although I shall not spend much time on Baker & Hacker's reading of Kripkenstein's sceptical solution, let me quickly point out first what is wrong with it. The problem is that they propose a non-factualist reading of the sceptical solution, i.e. they write that Kripkenstein's sceptical solution makes no use of the concept of a fact (or of the concept of truth).[78] This is not true, Kripkenstein does still allow deflated notions of fact and truth in his sceptical solution. Those notions mirror PI §136, where Wittgenstein himself writes that '*p*' is true if and only if *p* is the case. Baker & Hacker neglect this point. This does, however, not bar them from a clear view on what is wrong with the communitarianism of Kripkenstein's original sceptical solution:

> It is the world that determines *truth*; human agreement determines meaning. A correct account of rules and their relation to their extension, a proper *Übersicht* of understanding and following rules, must do justice to the fact that what we call 'following a rule' presupposes a certain constancy in the results of following a rule, without collapsing truth into consensus, abrogating the *internal* relations between rules and their applications, or detracting from the objectivity of rule-following. This the community view fails to do.[79]

Baker & Hacker show that Kripkenstein's sceptical solution is both wrong and not Wittgenstein's, but they do not discuss whether an alternative sceptical solution is possible. This is, as we shall see, because they do not emphasise enough the affinity between Kripkenstein and Wittgenstein when it comes to identifying appropriate targets for sceptical doubts. We should thus attend to their reading of the sceptical paradox.

When we come to the sceptical paradox, it turns out that Baker & Hacker have themselves been misread. Commentators argue that Baker & Hacker misinterpret the sceptical paradox, because they allegedly fail to see that the sceptical conclusion is both an epistemological and a metaphysical challenge:[80] the paradox questions how we can be

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to Baker & Hacker's reading. But I shall not go through them for two reasons. One reason is that my reading of Kripkenstein's position differs from Kusch's (as I have argued above). The other reason is that I do not need it for the dialectic of the present chapter.

[78] Cf. Baker & Hacker 1984c:4/37

[79] Op. cit. pp. 75-6

[80] Two recent commentators who make this mistake are Kusch (2006:240) and Hattiangadi (2007:173).

justified to mean addition by '+' and it also questions whether there is anything at all that constitutes that '+' means addition. Baker & Hacker are aware that Kripkenstein's sceptic raises a constitutive challenge as well and they even stress that difference between him and the classical sceptic:

> But Kripke's sceptic, unlike the classical sceptic, saws off the branch on which he is sitting. For he is not claiming that certain *given* knowledge fails to support other commonly accepted cognitive claims. […] Rather he concludes with "the paradox" that there is no such thing as meaning, so language cannot be possible. But *this* is not scepticism at all, it is conceptual nihilism[.][81]

On pages 27 and 28 Baker & Hacker again explicitly mention the constitutive challenge. That should sufficiently corroborate the claim that Baker & Hacker are fully aware of the scope of the challenge.

There is, however, one misreading of Kripkenstein's views in Baker & Hacker, which makes its first appearance on the same page. They write:

> Kripke in effect shifts Wittgenstein's problem of how, in what sense, a rule determines its application, to a problem of the relation between my past and present intentions, my meaning addition by 'plus' (and not a different arithmetical operation christened 'quaddition').[82]

The reading of the sceptical scenario proposed above does not leave room for such a shift. Wittgenstein's problem of how a rule determines its application finds its counterpart in Kripkenstein's focus on grasping as extrapolating. Posing the problem in terms of an allegedly dubious relation between past and present intentions marks merely a stage in Kripke's exposition of the problem—and not the problem itself.[83] Furthermore, Kripke's discussion of dispositionalism and *sui generis* states shows clearly that we do not deal with a problem about how past and present intentions are related, but with how an indefinite number of new applications of a rule can be extrapolated from a finite set of applications at hand.

Still, Baker & Hacker agree with Kripkenstein's sceptic on what the target is. As we have argued in the section on Kripke's discussion of dispositions, internal relations constitute their relata whereas external relations require a further element to mediate between the relata. The particular constitutiveness of an internal relation is tightly bound up with the immediacy of the relation, because internal relations constitute and justify correct relations at the same time. The constitution of anything externally related is, on the other hand, not intelligible without the mediating element. The target, according to Kripkenstein and Wittgenstein, is a

[81] Baker & Hacker 1984c:6
[82] Op. cit. p. 27
[83] Cf. Kripke 1982:21

conception of rule-following which construes the relation between the rule and its application as an external relation. Baker & Hacker also agree with the sceptic that assuming that the meaning of a word and its use are externally related—which is an entirely natural, but misleading, assumption—is subject to serious doubt. They write, echoing PI §201:

> [W]e are inclined to fall back on the idea that an *interpretation* mediates between the rule and what accords with it. And the rule-sceptic correctly insists that with *these* assumptions no one's interpretation can ward off corrosive doubt. But the sceptical solution does not fare any better.[84]

It is partially because the communitarianism of Kripkenstein's sceptical solution is not viable that Baker & Hacker emphasise the importance of understanding as internal relations the relations between rules and their applications on the one hand and the relations between the meaning of words and their uses on the other. When the sceptic asks for a fact which constitutes and justifies an internal relation, Baker & Hacker hold that this is not the sort of question one can ask about internal relations if one understands what internal relations are at all. This does not mean that they abandon objectivity. They hold fast, as we have seen in an earlier quote above, that how rules are applied and words are used exhibits a certain constancy and that this involves the obtaining of perfectly objective regularities. If such regularities would not obtain or fluctuate significantly, there would be neither rules, meaning nor concepts.

In order to bring out this point, it is instructive to discuss how the proposal has been misread. Anandi Hattiangadi, for one, completely misses what Baker & Hacker are after here. Not only does she take them to misconstrue the sceptic as a merely epistemological sceptic, she also misunderstands what internal relations are, because she explicitly claims that the sceptic questions them:

> The sceptic can grant that the relation between the *plus*-rule and its extension, and the relation between the *quus*-rule and its extension are internal. The sceptic can then ask what makes it true that *addition* is the concept I grasp, rather than *quaddition*.[85]

For Baker & Hacker (and, arguably, for Wittgenstein) grasping a concept—which is an entirely epistemological achievement—is internally related to applying the concept. That I grasp and apply both, the rule and the concept of addition, shows itself in me identifying '125' as the correct answer. So assuming a further conceptual link between rules and concepts, as Hattiangadi does, is uncalled for. But, if we grant some unqualified conceptual link between rules and concepts to Hattiangadi, the answer to her sceptic would be that one

[84] Baker & Hacker 1984c:95
[85] Hattiangadi 2007:172-3

grasps the concept because one follows the rule and one follows the rule because one does what counts as following the rule. Hattiangadi's objection has no target unless there must be a further fact for an internal relation to obtain. 'Internal relation' in her mouth stands for an external relation between a concept, its extension and a speaker.[86] That is, obviously, a fundamental mistake, because, on the one hand, there is a well defined difference between external and internal relations and, on the other hand, external relations are the sceptic's target whereas internal relations are (if properly conceived of) not.

Hattiangadi does point out that she merely questioned how Baker & Hacker may claim that to understand or grasp a rule is to know how to act in accordance with it in new cases.[87] But is the problem she wants to raise for Baker & Hacker's account not also a problem for herself? At the very beginning of her book, Hattiangadi commits herself to the view that to understand a proposition is to know what would be the case if it were true—even if I found myself in a situation never encountered before.[88] Ironically enough, Baker & Hacker make a similar point:

> It is widely held to be a conceptual truth that to understand a proposition is to know what would be the case if it were true. The parallel for rules is at least as plausible, namely that to understand a rule is to know what would count as acting in accord with it. What this truism rules out as unintelligible is the supposition that a rule can be grasped in ignorance of how it is to be applied.[89]

Baker & Hacker hence build on the very same intuitions about understanding which are also definitive for Hattiangadi. Without being aware of it, Hattiangadi also makes use of internal relations. This makes Baker & Hacker immune to her attacks, as any argument against Baker & Hacker's conception of understanding will turn against her as well, but any argument for it may also be grist to her mill.

Baker & Hacker do, however, fail to make clear that the sceptical paradox can be used to argue for a perfectly Wittgensteinian point. The point is—given that we call the rules, which make up a distinct area of language use or discourse, 'grammar'—that grammar does not require independent justification. Grammar merely requires that internal relations presuppose certain regularities and that these regularities are stable. To ask for any further justification for grammar means succumbing to a metaphysical picture which construes the relation between meaning and use as externally related through, for example, some mental state or some state of affairs independent of thought and talk. Baker & Hacker write about

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[86] See Hattiangadi 2007:174 for the explicit claim.
[87] Op. cit. pp. 174-6
[88] Op. cit. pp.1-2
[89] Baker & Hacker 1984c:101

Wittgenstein's views on facts and truth:

> He does not deny that what makes the proposition that *p* true is the fact that *p*. He does not repudiate the claim that the proposition determines in advance what will make it true (what fact must obtain to make it true). Rather, he rejects the metaphysical picture that goes with these claims. For these are grammatical statements, not metaphysical profundities. They concern intralinguistic articulations, not the ultimate connections between language and reality. It is a convention of grammar that 'The proposition that *p*' = 'The proposition that the fact that *p* makes true'. And so too 'The fact that *p*' = 'The fact that makes the proposition that *p* true'. Like everything metaphysical the harmony between thought and reality is to be found *in the grammar of the language*.[90]

This picture—the myth that grammar requires grounding in metaphysical profundities—is also attacked in the sceptical paradox and the sceptical solution is an attempt to overcome it without searching for ultimate connections between language and reality. A next question is how my alternative sceptical solution fares if it is compared to the orthodox Wittgensteinian point of view.

Orthodox Wittgensteinians and the Alternative Sceptical Solution

When it comes to sceptical solutions, it may go unnoticed that such solutions can also make use of internal relations. Some passages in Baker & Hacker's book prove that they succumb to this temptation.[91] But neither the original sceptical solution nor my alternative are, pace Baker & Hacker, committed to the view that there are external relations between meaning and use (or rules and their applications).

The Berkeleyan trick of inverted conditionals must be read as proposing that the conditions in the antecedent are defeasibility criteria, which falsify (if they are fulfilled) ascriptions of concept-possession, rule-following or meaningful language use.

> **General Inverted Rule:** If *A*- is the case, *S* cannot be said to φ.

If the defeasibility-criteria *A*- are not fulfilled, *S* can be said to φ. This way of introducing criteria does not specify whether we should take the relations, for which they are criteria, to be external or internal. Baker & Hacker are right in pointing out that if the relations are external, the sceptical paradox will not be overcome by the sceptical solution.[92] External relations require some sort of grounding through a third element, which mediates between the

[90] Op. cit. p. 35
[91] Op. cit. p. 37
[92] Ibid. Note that the section on Kripke's discussion of dispositionalism above makes it clear that Kripke himself is concerned to show that external relations cannot be defended against the sceptic.

two relata. But it is exactly that sort of grounding which the sceptical paradox rejects as illicit and it would be perverse to suppose that a sceptical solution must reintroduce it.

Let us focus on my alternative sceptical solution. According to it, the sceptic is silenced only if we have an appropriate conception of internal relations. An internal relation obtains if it is possible for a person *S* to claim that he is ***φ***-ing because he does not behave, speak or reason in a way that rules it out. Note that mere possibility suffices here, because self-ascriptions of meaning, rule-following and concept-possession have a defining status, for these claims are positive-presumptive: we may assume that some *S* is ***φ***-ing, whenever there is no evidence which rules it out. This does not downplay the status of rules as Baker & Hacker understand it. If we understand what follows if 'behaviour is correctly identified as violating a rule[, i]t confirms rather than falsifies the hypothesis *that there is* such-and-such a rule'.[93] Therefore, my alternative sceptical solution is in that respect perfectly compatible with Baker's & Hacker's orthodoxy.

An independent point that can be brought up against the original sceptical solution is that it forwards a *modus ponens* model of rule-following. Kripke indeed thinks that it is essential to our concept of a rule that it contains a conditional.[94] Unfortunately, our concept of a rule is somewhat broader than the *modus ponens* model suggests.

The *modus ponens* model requires that we follow rules for reasons, but Wittgenstein (PI §219) argues that we sometimes follow rules blindly.[95] We sometimes follow rules without any preceding reasoning or inferring and such immediate applications of rules are still perfectly rational and objective. In other words, having a reason means possibly having a warrant and when I claim to mean addition by '+', nobody may ask me for a reason to support the claim if normal circumstances prevail—so, there is no need for warranting such claims once a claim has been made and no defeasibility-criteria have been met. The idea behind blind rule-following is that there is a variety of claims which have this default-epistemology. We can only appreciate the full impact of this idea if we reconsider the following biconditional:

'It is not the case that *P*' is true if and only if it is not the case that '*P*' is true.

Consider any rule which we often follow blindly and which we cite to explain, for some proposition *P*, that it is not the case that *P*. The law of non-contradiction ~(p&~p) is such a rule. The rule can be cited to explain that 'It is not the case that this table exists and does not

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[93] Baker & Hacker 1984c:92

[94] This is also a cornerstone of Kripkenstein's bogus private language argument, because premises 2 and 3 explicitly state that it remains unexplained on what basis such conditionals can be justified; cf. Kripke 1982:94/107-9.

[95] This point originally stems from Wright 2007, but I use it here, to support my alternative sceptical solution.

exist' is true, but only based on the falsity of 'This table exists and does not exist'—a falsity for which it is constitutive. The rule does not enter a classically valid reasoning or inferring to warrant a proposition, because it is constitutive of what would count as reasoning and inferring in the first place. Any inference in the classical sense presupposes that ~(p&~p) holds and so does, by extension, any proposition available for inferring. So there cannot be a classically valid inference which adduces the law of non-contradiction as an optional principle to warrant a proposition—even though there are many invalid propositions that are invalid precisely because they violate the law. In such a case 'is true' cannot be replaced by 'is warrantedly assertible' for there is—and need not be—any further warrant buttressing some claim which only instantiates the law of non-contradiction.

Now consider the case of a rule which we do not follow blindly and which tells us to hold that 'It is not the case that *P*' based on some warrant. Take the statement 'It is not the case that I have enough white blood cells'. The claim requires empirical warrant and we may have the following rule:

> If *S* has less than 5000 white blood cells per microliter, then *S* has not enough white blood cells.

So, if I only have 2000 white blood cells per microliter, the rule tells me that I do not have enough. I obtain warrant for my claim by plugging the result of my white blood cell count into the rule. In such a case, the rule is construed as containing a conditional. And for such cases, the *modus ponens* model holds and there is always a reason or inference which warrants rule-following. In these cases we may replace 'is true' with 'is warrantedly assertible', because the extensions of the two predicates are congruent.

Blind rule-following is a concept which Baker & Hacker's Wittgensteinian perspective also employs. And because Baker & Hacker employ it, they can make sense of my alternative sceptical solution, for it becomes conceivable (as the examples above show) how the extensions of the predicates 'is true' and 'is warrantedly assertible' diverge. They write:

> Wittgenstein's rhetorical remark 'I follow the rule blindly', quoted out of context, suggests that normative behaviour is irrational, or non-rational. But in context it signifies not the blindness of ignorance, but the blindness of certitude. I know *exactly* what to do. I do not *choose*, after reflection and deliberation, I just ACT—in accord with the rule. The rule 'always tells us the same, and we do what it tells us', 'we look to the rule for instruction and *do something*, without appealing to anything else for guidance', 'it is my last court of appeal for the way I am to go', 'I draw its consequences as a matter of course'. On this confident exercise of normative skills, on the certain, unwavering understanding of what counts as following rules, are our

language-games built. One follows rules blindly, but not mindlessly.[96]

In the context of Kripkenstein's scepticism, these positive remarks require some pruning. As we have seen, Baker & Hacker have a tendency to illicitly underestimate Kripkenstein. Blind rule-following must be reserved for cases in which the blindness of certitude is licensed by the sheer possibility of positive-presumptive self-ascriptions of rule-following. For otherwise, rule-following becomes subject to Kripkenstein's sceptical doubts. This restricted picture of blind rule-following is, of course, exactly what my alternative sceptical solution argues for. All that is needed for it to work is the insight that blind rule-following has defeasibility-criteria and that self-ascriptions of rule-following, meaning or concept-possession are positive-presumptive.

This is of course not a harmless concession. It does amount to breaching Wittgensteinian orthodoxy to some extent, because Wittgenstein is, for example, usually thought to make the law of non-contradiction a cornerstone of any admissible practice of inferring.[97] This piece of orthodoxy must be rejected if my alternative sceptical solution is adopted. When talking with a paraconsistent logician (or a radical relativist), who thinks that some instances of claiming that (p&~p) are true, I may not blindly infer anything I want from a contradiction. The reason for this is that if the paraconsistent logician claims to follow rules which allow him to infer some true claim of the form (p&~p) and if there is no positive evidence that he is subject to a cognitive or rational shortcoming—apart from a silly prejudice in favour of classical logic on my part—then he counts as following his paraconsistent rules blindly. So, what counts as reasoning and inferring in such discourses must not necessarily involve that we may validly infer anything from a contradiction or that the law of non-contradiction is always true.

Apart from this disagreement on what counts as inferring, my reading of Kripkenstein also raises a substantial challenge for Wittgensteinian orthodoxy. It is hard to see how appealing to internal relations can explain grasping as extrapolating. After all, internal relations only determine which extrapolations from a finite set of previous language uses count as meaningful, i.e. count as semantically correct. But we should also ask how they determine what counts as an extrapolation at all, for which the question of semantic correctness (as opposed to factual, arithmetical or epistemological correctness) can be raised. The problem is that syntactically well-formed expressions can be correctly—in a semantic sense—or incorrectly used and that (syntactically correct) word-order need not be determined by the internal relations governing meaning. So, how are the syntactically well-formed

[96] Baker & Hacker 1984c:84
[97] Cf. Glock 1996:49

expressions (strings of sounds and signs, words, phrases etc.) constituted which are available for use and how may they, given some internal relation, count as semantically correct or incorrect?

Orthodox Wittgensteinians can of course claim that this is not a philosophical question in the first place, because philosophy is primarily concerned with what is meaningful, i.e. with the domain where internal relations reign. For them, strings of sounds and signs are not relevant as long as they are not meaningful, even though they may be subject to some non-philosophical research. That may be so, but if it is, they should nevertheless be able to say more about whether such non-philosophical enquiries are constrained methodologically by philosophy. After all, the most natural answers to the question about how expressions are constituted invoke dispositions and thus seem to rely on illicit external relations. Such natural answers entail that dispositions—and maybe also some external relations—are appropriate objects of non-philosophical research.

This issue will be fully discussed in part C, as it involves a variety of questions surrounding the concept of linguistic competence. But I shall nevertheless say something more about dispositions, abilities and normativity in the next two sections below to shed a bit more light on this.

Abilities and Dispositions

Baker & Hacker speak of blind rule-following as the confident exercise of a skill. It is surely useful to mention that language users exercise abilities as well, because understanding a language is strikingly like having an ability.[98] Let us define one-way powers as those powers of a human being which are not subject to volition. Take one-way powers to be basic human proclivities. And let us define two-way powers as those powers of a human being, which are subject to volition. Two-way powers are therefore exercised when it is normally possible to choose. With these two definitions in place, we find that abilities are two-way powers, because they are subject to human volition.[99] Dispositions, by contrast, are one-way powers. They determine what a subject can do or conceive of, but they are not subject to volition. So, the exercise of my ability to juggle is obviously subject to whether I want to. The actualisation of my disposition to sweat when I am too hot is not. But what exactly is the difference between an ability and a disposition? More specifically, can abilities provide the

[98] Baker & Hacker 1984c:17-8
[99] This take on powers is drawn from Hacker 2007, who adopts it from Kenny 1976.

sort of justification for correct extrapolations that, according to Kripke, dispositions cannot? If blind rule-following is an exercise of abilities, abilities must not be subject to Kripke's objections to dispositions. Otherwise, the prospects of a Wittgensteinian take on language use—be it orthodox or along the lines of my alternative sceptical solution—are also bleak.

It is crucial to recall that Kripke, as was argued above, understands dispositions to be the mediating elements of external relations. A flat-footed dispositional account of why one replies with the result of adding x and y when asked to compute 'x+y' has three elements: A disposition to compute problems of the form 'x+y', the problem itself and the result. There is, however, a more sophisticated way of construing the notion of a disposition.

Consider again salt's disposition to dissolve under some circumstances and not to dissolve under other circumstances. Salt's disposition to dissolve in water, for example, is readily actualised when temperature is increased, but it is not actualised if it is too cold, because the water will have a lower capacity to dissolve salt. And if we put the salt into benzene, it will never dissolve. Now, there are two ways of construing salt's solubility. First, there is salt, its solubility and the actualisation of the disposition under some circumstances; this is an external relation. Second, there is salt's disposition to dissolve under some circumstances—its solubility—and what counts as an actualisation of it; this is an internal relation. In the second case—where we only have salt's solubility and what counts as salt dissolving in a suitable agent—, both *relata* are constituted by their relation. Furthermore, either *relatum* can be explained most naturally in terms of the other.

There is an analogous conception of the dispositions of people. Consider a person's disposition to get angry when the train is too crowded or when dogs foul his garden. We may conceive of his anger as being internally related to what counts as manifestations of it: heavy breathing, a flush or the clenching of his teeth and fists whenever he is in a crowded train or whenever his neighbours' best friends foul his garden. The signs may be highly diverse, but it is nevertheless easy to see that his disposition to get angry and getting angry are internally related. There are also other character traits which we may call dispositions and which are also internally related to what counts as manifestations of them. But are there also linguistic dispositions along these lines?

There are certainly numerous borderline cases. A person's disposition to say 'ouch!' when stung by an insect, or when hurt in another way, belongs here. There is, one might want to claim, an internal relation between the disposition to say 'outch!' on the one hand and what counts as a person being moderately hurt, possibly in a (for her) surprising way. This is, however, not really a linguistic disposition in the sense required here. The disposition to say

‘ouch!’ under some circumstances does neither constitute an extrapolation from a finite set of saying ‘outch!’ nor does it justify an utterance of ‘ouch!’ as semantically correct. The disposition can be cited, of course, to excuse somebody who has said ‘outch!’ in inappropriate circumstances. Somebody stung by a been in the cinema may cry out ‘outch!’ and disturb everybody else at the film. She may then, if it does not take too much time, refer to the fact that she had been stung by a bee in order to excuse herself. But an excuse is not a justification.

A more interesting case, one dear to Wittgenstein, is the case of reading. It seems that the capacity to read is more like a disposition than like an ability. It is almost impossible to look at something written in a familiar language without reading it: if the eye movements correspond to the sort of movements required for reading, one reads *nolens volens*. Wittgenstein discusses these ideas in PI §§143-184. He holds that there are many different things that we call ‘reading’ (§§164 and 165) and that there was no feeling, remembering or consciousness that is the defining mark of reading. Wittgenstein also argues against the idea that reading is a mechanical process, for he thought it an illusion that we feel forced to latch a particular string of signs onto a particular sequence of sounds (§170).

The concept of reading is of course internally related to what counts as producing speech from text or symbols. Wittgenstein does, at least as far as I can see, not say anything that allows us to determine whether he took the capacity to read as a one-way or as a two-way power. But consider that it is almost impossible to look at familiar letters in a familiar sequence without actually reading them. This suggests that the capacity to read is more like a disposition than like an ability after all.

That the capacity to read is more like a disposition than like an ability is also brought out nicely by garden path sentences:

> The old man the boat
>
> The author wrote the novel was likely to be a bestseller.
>
> We painted the wall with cracks.
>
> The man pushed through the door fell.

In each of these examples, we are disposed to read at least one word as having a syntactical function which it has not: we read ‘man’ as a noun and not as a verb; we read ‘the novel’ as an accusative object and not as the subject of a declarative content clause; we read ‘with cracks’ not as an attribute modifying ‘the wall,’ but as an indirect object; we read ‘pushed’ as a preterite and not as a past participle.

Garden path sentences suggest that there are linguistic dispositions governing word order. The dispositions can only be overwritten if we find that they lead us to nonsensical

sentences, i.e. when they lead us down the garden path. So it appears that we are disposed to expect certain word orders when we read new sentences, but that we may also acquire the ability to correct our expectations when a first reading has no meaning. It is therefore perfectly natural to speak of dispositions determining extrapolations in these cases, the semantic correctness of which is determined in a second step and only if the reader has the appropriate abilities to do so.

I do not want to spell out here what sort of linguistic dispositions there are and how exactly they are related to linguistic abilities. All I want to draw attention to is the natural assumption that human linguistic powers are divided into two categories. The first category contains two-way powers subject to volition: abilities constituting understanding. The second category contains one-way powers not subject to volition, but internal relations nevertheless: here we have dispositions which possibly enable some extrapolations for which our abilities will sort out whether they are semantically correct in a second step.

One might worry that this approach to linguistic dispositions is also subject to Kripke's worries. After all, even if those alternatively construed linguistic dispositions constitute some aspects of language use, they can still not justify it. This is true, but not a problem. Consider self-ascriptions of character traits. When I claim that I get angry whenever my neighbour's dogs foul my garden, the correctness of that claim is positive-presumptive. Unless there is evidence that I do not get angry when my neighbour's dogs foul my garden, I must henceforth be regarded as having the emotional disposition of getting angry in these circumstances. No further justification is need in such cases. But it is not the disposition itself which provides justification, it is the positive-presumptive status of the self-ascription of the disposition that secures the grounds.

Something similar seems, at least *prima facie*, conceivable for the case of linguistic dispositions. Consider a native speaker of German who learns English. Due to his linguistic dispositions, he might be inclined to incorrectly say 'The police is coming', because 'die Polizei' is singular in German. Now, self-ascribing such a linguistic disposition makes perfect sense and such self-ascriptions are certainly positive-presumptive. And it is obviously not the case that such dispositions do justify semantically correct language use—they may excuse some cases of incorrect use at best. All of this amounts to conceding that, while dispositions might determine what counts as linguistic extrapolations, appropriate abilities are required for settling issues of semantic correctness.

So, I have argued here that it is indeed useful to distinguish between linguistic abilities and linguistic dispositions. But whereas orthodox Wittgensteinians do not consider the

possibility that linguistic dispositions may explain important aspects of language use, I have suggested that they might determine what counts as an extrapolation at all. I shall discuss this issue between orthodox Wittgensteinians and my alternative sceptical solution in part C of the present thesis. I have only inserted it here to make clearer in what respect my proposal is heterodox. The next section will provide a quick overview of three different conceptions of normativity. It will serve as a basis for discussing anti-normativist proposals which appear later on.

Varieties of Normativism: A Quick Survey

Let me recapitulate some ideas from Kripke's take on normativity. Recall that Kripke himself suggests that once what one should say or do is accounted for in terms of epistemic entitlement, the relevant aspects of his normativity claim are captured. This must, as had been argued, not be taken to imply an unbridgeable difference between normative and descriptive accounts of something. All that Kripke is after is that semantically correct language use requires justification in a way that purely descriptive accounts cannot supply.[100]

My alternative sceptical solution has brought in a new take on justification. It has been argued that the only sort of justification that passes muster in the context of Kripkenstein's sceptic is the sort of default justification bound up with self-ascriptions of meaning, intention, rule-following or concept-possession when there is no evidence that actually topples the self-ascription. Self-ascriptions in circumstances where defeasibility-criteria have not been fulfilled are positive-presumptive claims: no further warrant is required for them.

Wittgensteinian orthodoxy distinguishes two conceptions of semantic normativity which are meant to account not only for justification, but also for meaning. Both conceptions are meant to fully explain what one ought to count as a semantically correct extrapolation. I shall now introduce the two conceptions and assess them from my heterodox point of view developed so far. This will then complete my survey of Wittgensteinian views.

Hans-Johann Glock has distinguished three dimensions of normativity: the first is bare normativity, the second is rule-based normativity and the third is prescriptive normativity.[101] According to Wittgensteinian orthodoxy, only bare normativity and rule-based normativity

[100] I suspect that this is also motivated by his well-known worries about descriptions. I can, however, not explore this idea here.
[101] The list is from Glock 2009:162-3, there are also two conceptions of content-normativity. Issues surrounding content normativity will not concern us until the chapter on the varieties of realism (2.2).

can possibly account for meaning and semantic correctness.[102] Prescriptive normativity is thrown into the mix here in order to explain what Wittgensteinians do not regard as a good conception of semantic normativity. Let me start with bare normativity of meaning:

Bare normativity of meaning

(BNM) *p* is meaningful → there are conditions for the correct use of *p*.

Any proposal committed to some sort of semantic normativity is automatically committed to bare normativity of meaning. Even if one holds that normativity is basically about justification and that there is no such thing as meaning without justification, one still connects meaningfulness with conditions under which expressions are used. So, Kripkenstein's sceptical solution, my alternative and the orthodox position endorsed by Baker & Hacker subscribe to some version of this. There are, however, two potential pitfalls here. First, the conditions mentioned in the definition must be construed broadly enough to allow for conditions under which an utterance counts as incorrectly used, because some defeasibility-criteria have been fulfilled. Often enough, correctness-conditions are supposed to sum up and constitute an account of the conditions under which language use can be regarded as grounded in extra-linguistic reality. This is obviously not a view that a sceptical solution can subscribe to and it is also something orthodox Wittgensteinians abhor. It therefore appears that the sceptical paradox restricts how bare normativity may be understood by restricting the sense in which the term 'condition' is applicable.

The second potential pitfall is a bit more substantial. Apart from the worries about correctness-conditions which I have just mentioned, it may be asked what explanatory work the term 'correct' does in the definition anyway. After all, the only circumstances in which we normally call a particular language use correct is when we want to explicitly counter (or pre-empt) a claim to the contrary. In ordinary circumstances, it is much more natural to hold that an utterance is meaningful if conditions for its use have been fulfilled. This is especially true for proposals which explain meaningful language use in terms of internal relations. Internal relations are thought to hold between what a linguistic expression means and what counts as using it. If we take them to hold between meaning and correct use instead, we leave unexplained what the relation between meaning and use is in the first place. And that is something no viable account of meaning can afford to leave unexplained. Even worse is the idea that correctness-conditions mediate between what an expression means and how it is used. On that construal, appealing to correctness-conditions leads directly into the sceptic's fangs, as it bring in pernicious external relations through the backdoor. It therefore appears

[102] Cf. Baker & Hacker 2005:140

that appealing to correctness is redundant—and potentially pernicious. This does, however, not lessen the importance of bare normativity—Kripke's discussion of normativity and dispositions has conclusively shown that it is a pivotal concept.

Bare normativity is, however, not the only proposal on the market. Especially orthodox Wittgensteinians are fond of explaining semantic normativity in terms of rules. So, let us turn now to rule-based normativity, which is quite controversial:

Rule-based normativity of meaning

(RNM) *p* is meaningful → there are rules for the use of *p*.

Note that the definition of rule-based normativity does neither appeal to conditions of use nor to correctness. It therefore has two important advantages over bare normativity. We have seen that rules must not necessarily be construed as containing a conditional. Orthodox Wittgensteinians can allow blind rule-following which do not require appealing to explicit rules. It may well be that two users of the same language use an expression in exactly the same way, but still disagree on how the rule for the expression's use is to be spelled out in detail. This is admissible if the disagreement is about which expression of the rule provides a better explanation of their practice. If their disagreement is about which expression of the rule explains their practice at all, then there is a confusion about what the practice is and not only about how the salient rules are to be put into words.

It is, nevertheless, important to observe that the concept of a rule of language use (qua determining meaning) is tightly connected with the concept of an ability. Rule-following is volitional and, therefore, requires the ability to follow the rule. Blind rule-following is volitional in the sense that we may decide to breach the rule. I may, for example, voluntarily breach the rule 'a coloured patch is not red and green at the same time', even though I and others normally follow this rule blindly. But if I breach the rule, what I say will of course not make sense anymore.

It is important to distinguish between voluntarily breaching a rule and overcoming a disposition. If I voluntarily breach a rule, I refuse to partake in a practice. If I overcome the disposition to read 'men' in 'the old man the boat' as a noun, I voluntarily invoke rules determining meaningful language use in order to correct the distorting effect of my disposition. Breaching rules, therefore, amounts to not making sense and overcoming dispositions is driven by a decision to make sense. This should make clear that my alternative sceptical solution subscribes to rule-based normativity just as much as orthodox Wittgensteinians do—albeit for different reasons.

As far as my alternative sceptical solution and the orthodox Wittgensteinians are

concerned, the explanatory role of the concept of a rule should be clear by now. We will see below what non-Wittgensteinians object to rule-based normativity.[103] In order to prepare the grounds for this, I shall rehearse a point about prescriptive rules which I have already mentioned in the section on Kripke's take on dispositions and normativity, but which cannot be emphasised enough. The most straightforward definition of prescriptive normativity runs as follows:

Prescriptive normativity of meaning

(PNM) *p* is meaningful → there are prescriptions for the use of *p*.

Prescriptive normativity must be distinguished from rule-based normativity, because not all rules are prescriptions. Prescriptions 'advise one on how to pursue in an optimal fashion an activity that can be specified independently of the rule'.[104] The crux is that this entails that every prescription can be paraphrased in accord with the *modus ponens* model of rule-following. Recall that the *modus ponens* model has it that any admissible rule contains criteria (or defeasibility-criteria), fulfilment of which governs language use or action. So, a prescriptive rule setting down the criteria for the usage of the word 'thirsty' is admissible if it can be brought into a conditional form like this:

> The word 'thirsty' is used meaningfully if one ought to apply it to persons and animals with low body fluid levels and a desire to drink potable fluids.

The conditional expressed by such a paraphrase always specifies how one ought to use language if one wants to use it meaningfully. If no paraphrase along these lines can be given, the requirement that the optimal fashion of pursuing an activity can be specified independently of the rule will not have been met.

It is important to distinguish prescriptive rules from constitutive rules. Constitutive rules define (at least in part) an activity (like castling in chess) or a thing (as the EU norms settling what counts as chocolate do). One rule of that sort is the law of non-contradiction ~(p&~p). It does not prescribe that one should not violate it when dealing with classical logic. Rather, whenever one violates it one cannot be said to infer according to classical logic, for the law of non-contradiction partly defines classical logic. Furthermore, it is also important to bear in mind that constitutive rules are often followed blindly if one engages in the activity they (partly) define, as they do usually not fit into Kripke's *modus ponens* model of rule-following.

For Wittgenstein himself (cf. PG pp. 184-5 and PI §496), grammatical rules (those

[103] Boghossian 1989b/2003a/2005, Hattiangadi 2007, Glüer & Wikforss 2009 and Glock 2003/2009 have extensively discussed rule-based normativity and these discussions merit their own section below.
[104] Cf. Glock 2009:171

which determine language use and concept possession) are constitutive rules and not prescriptive ones.[105] And because internal relations are constitutive of their *relata* and because, as we have seen, grammar does not require extra-linguistic justification, constitutive rules can be employed to describe or express internal relations. The law of non-contradiction thus partly determines, being a constitutive rule, what counts as inferring in accord with classical logic and, hence, understanding classical logic.

It therefore appears that prescriptive rules do not play an important role here. It is not a concept with which Wittgensteinians account for language use. Furthermore, Kripke's commitment to the *modus ponens* model does not necessarily entail that he is committed to prescriptive rules as well. After all, the inverted rules of Kripkenstein's original sceptical solution do not contain prescriptions, even though they still justify in accord with the *modus ponens* model. By abandoning Kripkenstein's sceptical solution, however, we have also come to abandon the *modus ponens* model in order to introduce the concept of blind rule-following. So, we are left with rule-based normativity of meaning, which my alternative sceptical solution employs just as much as more orthodox Wittgensteinians.

2.2) Varieties of Realism

Kripkenstein's paradox introduces the following problem: how is it possible and justifiable to extrapolate an indefinite number of new correct language uses from a definite number of language uses which already count as correct? Kripke himself understands 'correct' here as referring to semantic correctness: an extrapolation is semantically correct if its correctness only depends on what the words involved mean. Semantic correctness may be contrasted with factual and epistemological correctness. An extrapolation is factually correct if its correctness depends on what facts obtain and an extrapolation is epistemologically correct if it is suitably warranted.

Wittgensteinians separate semantic correctness from factual and epistemological matters, because they regard semantic issues as conceptually prior to factual and epistemological issues. They argue for this view by insisting that rules of language, which determine meaning, need no justification independent of linguistic practices—for them, correct extrapolations of new language uses are an entirely intralinguistic affair.

An interesting alternative is based on the intuition that semantically correct extrapolating always already involves getting the facts right: applying the predicate 'is green'

[105] Cf. Glock 2009:172

in accord with what it means always involves saying something true and understanding 'is green' involves knowing whether the expression applies to a given object. Whereas Wittgensteinians hold that questions about whether the application of a predicate to things accords with the facts always presuppose that semantic questions have already been solved, the alternative view rejects this and claims that factual matters are possibly independent of human thought and talk. Proponents of this alternative view usually go on to claim that we must explain how language latches onto reality, precisely because factual matters are possibly independent of thought and talk. The view is commonly called 'semantic realism'.

In what comes below, I want to distinguish two varieties of semantic realism. First, there is what Boghossian calls 'robust realism'. According to this view, we must explain how language latches onto reality by invoking epistemic rules. So, a correct extrapolation of new language uses involves getting the facts right as far as epistemic rules require me to and it also involves expressing these facts. Boghossian's proposal is a moderate version of semantic realism: his epistemic rules may allow me to count some extrapolations as correct even though they are not factually correct. A good example for this is the weather forecast. When I forecast the weather, I extrapolate what is going to happen according to the specific principles governing state-of-the-art weather forecasts. And even if the weather turns out to differ from what had been forecasted, the forecast itself counts as correct, because it was made in full accord with the relevant epistemic rules.

A more austere version of semantic realism informs Anandi Hattiangadi's contributions to the debate. She argues that we must explain how language latches onto reality through truth-conditions for sentences and through correctness-conditions for particular words. There are, for her, no epistemic rules which are required to explain the word-world interface. 'Bob has a green shirt' is true if and only if Bob has a green shirt, no matter whether the correct use of this sentence in a new situation has been extrapolated from what it meant in other situations or from what some epistemic rule entitles me to extrapolate. This is also why she argues that no sort of normativity plays a role in a good answer to Kripkenstein's sceptic.

The remaining sections of the present part of the thesis introduce the views of Boghossian and Hattiangadi in a more detailed fashion. I shall abstain, at least for the moment, from trying to decide between their views and the opposing views pertaining in the Wittgensteinian camp. The sections below merely set the stage for an extended confrontation between the two camps, which is the topic of the next part of the thesis, part B.

Paul Boghossian's Contributions to the Rule-Following Debate

Paul Boghossian's paper 'The Rule-Following Considerations' can be regarded as one of the most important contributions to the rule-following debate as initiated by Saul Kripke. It is very useful for finding one's way into the debate, as the paper provides an overview of the important issues addressed up until 1989—many of which still are discussed today. As such, it is also an essential reading for anybody who is interested in the nature of meaning, especially those aspects of it, which have to do with its reality, reducibility and privacy. It is important to note, however, what the paper is not meant to deliver. It is not a paper about exegetical matters, but it is a purely 'philosophical assessment'.[106] Boghossian adds (in a footnote) a reason for separating Kripke's take on rule-following from Wittgenstein's and not to count the latter's views as forming part of the relevant philosophical contributions: 'I have actually come to despair of a satisfactory interpretation of Wittgenstein's views.'[107] And because the philosophical assessment he proposes does not start with a consideration of Wittgenstein's contributions, the assessment does not introduce one in the end either:

> The moral will not be recognizably Wittgensteinian: I shall argue that, *pace* Kripke's intent, the conception of meaning that emerges is a realist, non-reductionist, and judgement-independent conception, one which, moreover, sustains no obvious animus against private language.[108]

One may question whether it is wise to shove Wittgenstein under the carpet like that and to ignore the bump it leaves. It is, however, interesting for the present dialectical situation, as the only viable conception of semantically correct language use available so far is Wittgensteinian and it will prove instructive to subject it to the issues Boghossian raises.

Boghossian's views on Kripke's sceptical solution, his defence of Kripke's arguments against dispositionalism and his assessment of other non-reductionist proposals will not, despite their influence, play a role here. What will play a role is his understanding of how rule-following relates to meaning and intention, how this gives rise to questions of semantically correct language use, what normativity is meant to be and what perspective on meaning this leaves us with. Boghossian himself first discusses the concept of correctness, goes on to normativity and then turns to how meaning, content and rule-following are related. For present purposes a reversed order of these issues seems more suitable.

Boghossian on Rule-Following and Meaning

[106] Boghossian 1989b: 142
[107] In Boghossian 2008: 9 he adds that this reason is developed in his unpublished manuscript 1988.
[108] Boghossian 1989b: 142

So, how do meaning and content on the one hand and rule-following on the other hang together? For Boghossian, the right answer is that they do, strictly speaking, not hang together at all and the problem we are talking about is in an important respect not a problem about rule-following, but rather one about the constitution and the epistemology of meaning and, hence, a problem about meaningful contents as manifest in thought and talk.[109] The reason why many writers wrongly assume that there is a deep connection between rule-following and meaning (plus meaningful contents) is that they think that people first follow rules and that, as a result of this antecedent rule-following, meaningful contents somehow ensue. An antecedent rule-following will then also determine what is to count as semantically correct language use or as an epistemically correct belief, because the contents of thought and talk acquire their meaning, and hence their applicability, from it.

If we start a discussion on how rules and meaning are related like this, we find ourselves compelled to decide on which has priority over the other. Boghossian obviously did see an issue of priority here and decided that meaningful contents enjoy priority over rules, because construing rules—which themselves have a meaningful content after all—as conceptually prior to meaningful contents seemed paradoxical to him. What is downplayed by this perspective is that linguistic rules and language use are on a par, because one can usually be explained in terms of the other. I can cite the rule 'English verbs requires the suffix –s in the first person singular' to explain why speakers of English add the suffix –s to verbs in the first person singular. Similarly, that there is a rule—and that we usually regard the casual omission of the suffix as an exception to a general rule—can be explained by saying that this is how people use language.

Furthermore, we can hold that rules and meaning are on a par, because I can cite the rule 'vixens are female foxes' in order to explain what somebody means by the word 'vixen'. I can, conversely, also explain the rule by pointing out that speakers of English apply the word 'vixen' to female foxes. I take this to be the standard Wittgensteinian way of construing the relation between rules and meaning. But in order to see what Boghossian is after, we have to suppress this possibility for a moment.

So, we assume that rules and meaning are independent enough to make sense of questions of priority between them. In recent years, it has become fashionable to discuss two bizarre positions about normativity which can be derived from this view. The first position is committed to the idea that both linguistic and mental content have conceptual primacy and

[109] Boghossian 1989b: §8

that oughts depend on it. This approach is sometimes called 'CE normativism', because normativity according to it is assumed to be content-engendered.[110] The second position construes content as being determined by preceding rules or norms and is called 'CD normativism', as it takes normativity to be content-determining. What is important here is that, for both position, rules are taken to be prescriptive. Rules are meant to provide a standard for how language ought to be used.[111]

In connection with the rule-following debate, CD normativism does not arouse great sympathies. The reason is that it requires, on the one hand, that whatever determines content must be independent of it and still license a derivation of an ascription of obligations from an ascription of meaning or belief. Based on their reading of Wittgenstein, several authors have rejected that sort of approach.[112] One may, for example, motivate the rejection of CD normativism with the worry that we have an epistemological problem if we attempt to explain how autonomous norms and rules are internalised in training so as to guide successful partaking in practices of various kinds.[113] The worry is that it is hard to see how something independent of meaningful content can determine such a content. One might now try to argue for the autonomy of the norms and rules in question while rejecting the need for their internalisation in training.

The classical Platonist way of doing this is to adopt a nativism about the norms and rules in question. According to such a proposal, the norms and rules need not be available to the average conscious thinker and speaker while they guide her; and because those norms and rules are innate, we tend to find their manifestations in regularities of how thinkers do think and speakers do speak. Internalisation, on such a view, is not necessary; rather, the innate potential to develop linguistic abilities and other powers is actualised in a natural way: innate powers develop much like other biological features of humans (viz. the spine, the brain, the skin, the immune system). The problem in the present context is obvious: average thinkers and speakers usually do know what they believe and mean and they can also explain it—

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[110] Glüer & Wikforss 2009

[111] This calls for an aside. If looked at from a Wittgensteinian perspective, the opposition between CE normativism and CD normativism is not very helpful. First of all, the issues of priority it plays on is a pseudo-problem. Second, each normativism invokes prescriptions of some sort. We have, however, found several reasons to reject prescriptions as a basis for normativity claims. But because these labels are currently fashionable, I present the issue in these terms as well. But I assume that it will become clear that the more convincing aspects of semantic realism do not require attacking strawman positions such as CE and CD normativism. It is surprising and sad that some philosophers think that this is one of the better lines of reasoning that semantic realists have available.

[112] Some of these authors are: Kripke 1982, McDowell 1984 and Wright 1980 and 1989a. See Hattiangadi 2007:161-168 and her 2003 for an insightful and convincing rejection of Robert Brandom's version of CD normativism.

[113] Wright 1989a: 127

usually by citing rules. Furthermore, unless exceptional circumstances pertain, one can usually take them to be authoritative about self-ascriptions of beliefs and meaning and that authority requires no assumptions about human biological endowment to be compelling. A flat-footed nativism will hence not do, simply because it cannot account for the sort of phenomenon we are after when we ask for an internalisation. In other words, a flat-footed nativism does not acknowledge that there is any epistemological question at all and that simply amounts to refusing to engage with Kripkenstein's justification question.

So, we are left with CE normativism, i.e. the idea that meaningful content has priority over semantic normativity. But that approach does not lead far either. Boghossian writes against CE normativism:

> The point is that the ordinary concept of following a rule—as opposed to that of merely conforming to one— is the concept of an *intentional* act: it involves the intentional attempt to bring one's behaviour in line with the dictates of some grasped rule. [...] As such, however, the ordinary concept of following a rule is the concept of an act among whose causal antecedents lie contentful mental states; consequently, it is a concept that *presupposes* the idea of a correctness condition, not one that can, in full generality, help explain it. Since it makes essential play with the idea of a propositional attitude, which in turn makes essential play with the idea of content, rule-following in this sense presupposes that *mental expressions* have conditions of correct application. On pain of regress, then, it cannot be true that mental expressions themselves acquire meaning as a result of anyone following rules in respect of them.[114]

According to this view, rule-following does not explain meaning, but presupposes it, and that is wrong. So, now that neither CE nor CD normativism appear viable, what should a semantic realist conclude from this? Anti-normativists like Hattiangadi conclude that there is no such thing as semantic normativity. Boghossian agrees, but adds (as we shall explain in more detail below) that there is epistemic normativity. But note that both reactions tacitly presuppose that we can make sense of the question whether semantic normativity is prior to meaningful content or vice versa.

An alternative reaction to the failure of CE and CD normativism consists in objecting that such questions of priority are nonsense. This amounts to arguing that, as I have explained above, rules can be used to explain what counts as language use and that those rules only count as rules if language users comply with them, if they explain their practices through them and if they are also prepared to agree to any of the rules in question when presented with them. Such an appeal to rules does, pace CE and CD normativism, not construe them as

[114] Boghossian 1989b: 151-152

prescriptions. It is precisely this view that true proponents of rule-based normativity of meaning defend. For them, the question of priority that impresses Boghossian and Hattiangadi is malformed.

So, is there a third view apart from the Wittgensteinians and the semantic realists? Alexander Miller suggests such a third view on how rule-following and meaning are related. Meaning something, for him, is analogous to intending to follow a rule. This also amounts to rejecting the sort of priority presupposition that fuels anti-normativism, but it does not imply a Wittgensteinian notion of explanation. The point of the alternative understanding is that grasping a rule and grasping a meaningful content allegedly license extrapolations in the same way. Miller writes:

> Suppose I intend to follow the rule 'add 2' when writing out the following arithmetical series: 2, 4, 6, 8, 10,.... Intuitively, later on in the series, certain continuations (e.g. 24, 26, 28) are determined to be correct by the rule which I intend to follow, and certain continuations are determined to be incorrect by that rule (e.g. 34, 35, 37). This is the analogue of the applications of a predicate being determined as correct or incorrect by the meaning of the predicate.[115]

In applying a predicate to objects, we do so in accord with the meaning of the predicate. The meaning of the predicate should allow us to apply the same predicate to the same objects over and over again for each object we examine, just as the intention to follow the rule 'add 2' allows to expand the series '2, 4, 6, 8, 10' over and over again for each stage of the series to which we happen to apply the rule. Meaning on the one hand and intention in rule-following on the other thus determine correctness in the same way as long as they prevail.

So, Miller holds that intending to follow a rule is analogous to meaning something by an utterance. Just as an intention to continue with an action determines a series of particular deeds—like wanting to bake a cake determines the steps necessary to prepare the dough, form it and put it into the oven—meaning can be seen as determining a series of semantically correct applications of a predicate like 'is brown' to brown things. The price for this, Miller argues, is that one has to give up the explanatory claim 'that expressions acquire meaning in virtue of our following rules in respect of them'.[116] Miller's view, then, is that rule-following does not presuppose meaning, but that it does not explain it either. This eventually amounts to a rejection of semantic normativity, because we cannot cite rules to explain that grasping a meaningful expression determines how it should be used, i.e. what extrapolations we are allowed to make from it. Extrapolating new uses of language can, then, not be correct in a

[115] Miller & Wright 2004: 15
[116] Ibid.

semantic sense. What extrapolations count as correct must be settled by other—presumably factual or epistemological—features intervening in language use. Language, on that view, cannot fully take care of itself.

The view that Miller puts forward here is mistaken. There is an asymmetry between how intentions and meaning determine extrapolations within a series. If I intend to bake a cake, then my intention determines which steps in the baking-process can be assessed as correct, i.e. as conducive to the end of baking a cake. The intention therefore determines what will count as instrumentally correct for me. If you intend to bake a cake, something else may count as instrumentally correct for you. But even if you bake the cake in exactly the same way as I do, my intention will not determine instrumental correctness for you. Only your own intention can determine instrumental correctness for you.

The case of semantically correct extrapolations of any sort is fundamentally different. If I extrapolate new applications of the word 'green' to things never encountered hitherto, my meaning green—and not dark yellow—by 'green' must count as semantically correct or incorrect for anybody who speaks the same language.

I have, of course, already introduced the asymmetry between how intention and meaning determine extrapolations when I discussed my conception of objectivity in section 1.3 above. Still, it is important to see that Miller's alleged alternative does not work, precisely because of this important asymmetry.

Let me recapitulate the situation. As things stand now, we have to choose. The first view is Hattiangadi's anti-normativism. The second one is the rule-based normativity of meaning that Wittgensteinians defend. The third view is a view that does not allow semantic normativity, but which allows that correct language use is regulated by epistemological or factual features intervening in language use.

Boghossian (eventually) adopts the third view. We shall see below that he allows that some rules govern grasping as extrapolating and it seems that worries surrounding CE and CD normativism are not intended to apply to such rules; that might indeed work, because those rules are not supposed—as will be shown—to fully determine meaning and intention in all cases. The rules in question are mainly logical rules like *modus ponens*, induction and epistemic rules like observation. They secure the epistemological correctness of extrapolations in language use, because there is—in Boghossian's eyes—no such thing as pure semantic correctness. Here are the definitions he proposes, note that the rules constitute a *prima facie* permission[117]:

[117] Boghossian 2008:109

(Observation)

If it visually seems to you that p, then you are prima facie rationally permitted to believe that p.

(Induction)

For appropriate Fs and Gs, if you have observed *n* (for some sufficiently large *n*) Fs and they all have been Gs, then you are prima facie rationally permitted to believe that all Fs are Gs.

(Modus Ponens)

If you are rationally permitted to believe both that p and that 'If p, then q', then, you are prima facie rationally permitted to believe that q.

With that caveat in place, how is Boghossian's concept of meaning supposed to be brought together with a suitable conception of correct language use and normativity? He writes:

> Suppose the expression 'green' means *green*. It follows immediately that the expression 'green' applies *correctly* only to *these* things (the green ones) and not to *those* (the non-greens). The fact that the expression means something implies, that is, a whole set of *normative* truths about my behaviour with that expression: namely, that my use of it is correct in application to certain objects and not in application to others.[118]

We should highlight a few points that Boghossian takes for granted here: (1) truths can be normative in the sense that extrapolations in language use should also be factually (and not merely semantically) correct, (2) a whole set of normative truths is implied by the fact that an expression means something, (3) the particular set of normative truths which is implied by a particular meaning are about how somebody uses that expression, (4) paradigmatic for the use of an expression is its application to objects, (5) applying an expression to an object can be factually correct or not. Boghossian does not argue for these five points, but goes on to explain his notion of correctness by relating it to truth-theoretic and assertion-theoretic approaches to meaning and states what he takes to be Kripke's most important insight:

> The normativity of meaning turns out to be, in other words, simply a new name for the familiar fact that, regardless of whether one thinks of meaning in truth-theoretic or assertion-theoretic terms, meaningful expressions possess conditions of *correct use*. (On the one construal, correctness consists in *true* use, on the other, in *warranted* use.) Kripke's insight was to realize that this observation may be converted into a condition of adequacy on theories of the determination of meaning: any proposed candidate for the property in virtue of which an expression has meaning must be such as to ground the

[118] Boghossian 1989b: 148

> 'normativity' of meaning—it ought to be possible to read off from any alleged meaning-constituting property of a word what is the correct use of that word.[119]

The way he tells the story here, rule-following scepticism is only concerned with point (5) and how that can be grounded. But we can easily ask how (1)-(3) are to work in detail. After all, it is not clear whether all truths are normative or not. We also do not know in detail how the obtaining of a fact can imply an ought for one's thought and talk. Are we supposed to think and talk in accord with facts which obtain, but which we do not know and, maybe, can never know? Doubts arise as to how (and whether) Boghossian can adequately meet the justification question—the major obstacle for dispositionalism. Worries concerning these points did, as we will see soon, prompt Boghossian to enquire into these assumptions.

An assumption which Boghossian never questions is (4): paradigmatic for the use of an expression is its application to objects. Together with (5) it forms the core of Boghossian's conception of the right approach to meaning:

> Let *robust realism* designate the view that judgements about meaning are factual, irreducible, and judgement-independent. Then the moral of this paper—if it has one—is that the major alternatives to robust realism are beset by very serious difficulties.[120]

As Boghossian rejects, more or less, the proposals that I have already ruled out above—including further varieties of dispositionalism—reconsidering them seems not called for. But we should still ask what precisely his robust realism commits him to.

The first mark is its factualism: there are facts which constitute and justify meaning. The second mark is its non-reductionism: meaning and understanding cannot be explained in terms which do not refer to semantic phenomena. The third mark is its judgement-independence: facts about meaningful content can never be based on what people judge to be such facts, because any judgement has a meaningful content—which in turn is to be specified in terms of the correctness-condition for an expression's application to objects before it can figure as the content of any judgement. It will be shown in the next section that his realism eventually involves, in addition to the points just mentioned, further epistemological considerations.

Boghossian's Robust Realism and Normativity

Kripke claims that the facts fixing meaningful content must also enable an understanding of the relation between meaning and future use as normative—not as descriptive. How exactly

[119] Ibid.
[120] Loc .cit. p. 185

does Boghossian, in his recent writings, construe Kripke's distinction between dispositional and normative analyses of meaning?

> [...] the two leading naturalistic theories for the fixation of content – informational semantics and inferential role semantics – are both versions of a dispositional theory in the relevant sense.
>
> Against this popular idea about naturalizing meaning, Kripke deploys a number of considerations: that our dispositions are finite; that one cannot read off our dispositions what we mean because our dispositions may include dispositions to make errors; and so forth. However, even if it were possible to overcome these objections, Kripke argues, one could still not identify meaning facts with dispositional facts because at bottom the relation between meaning and future use is *normative,* whereas the dispositionalist construes it descriptively.[121]

The question Boghossian now asks on his readers' behalf is whether there is an intuitive sense in which meaning is normative. For, after all, we may only argue that every theory of meaning has to respect it if we had strong pre-theoretical intuitions about this sort of normativity. And only if that was established, the normativity of meaning could be employed for anti-naturalistic purposes.

First of all, we need a new distinction here. Boghossian tells us that, despite the fact that Kripke assumes that linguistic content and mental content are both normative, his own argument requires treating linguistic and mental content in a different way.[122] We have discussed above that we should neither say that meaningful linguistic content antecedes normativity (CE normativity) nor that normativity antecedes meaningful linguistic content (CD normativity). This already suggests that Boghossian's distinction is interesting. There are indeed reasons to suppose that linguistic content and mental content are not necessarily the same. It is possible that the content of, for example, a belief and the content of an utterance can come apart. A skilled blacksmith may believe, based on experience, that he has to hammer an incandescent piece of metal for so-and-so long and in such-and-such a fashion, but he may not be able to articulate this believe simply because the mental content informing his action is more fine-grained than any linguistic content he could possibly express. A dog may believe that a cat is in a particular tree and acts accordingly, even though it would be bizarre to tacitly suppose that the dog can articulate this (or that his barking counts as an articulation of the belief). We should, therefore, distinguish linguistic from mental content. We should then also bear in mind that content is not always to be conflated with meaning,

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[121] Boghossian 2005:205. Note that Boghossian 2003a is an old version of his 2005 and I shall refer to the latter only, even though his 2003a is sometimes discussed independently of his revised 2005.
[122] Loc. cit. pp. 206-207

because only those contents which can be expressed through words do count as meaningful. Meaning, as we discuss it here, is a linguistic concept.

Now, Kripke holds that if one means plus (i.e. the addition function) when one asks '57+68=?' one should take '125' to be the correct answer to the question. The relation between meaning and future use seems normative in a semantic sense.[123] What does that come to? Well, the normative relation must, for example, not be one of politeness, which is a moral obligation, and it must not involve some auxiliary desires. The first is obviously not a genuine case of semantic normativity, as it is a moral constraint on good language use. The second approach is also unhelpful, as auxiliary desires yield a merely hypothetical normativity. Boghossian reminds us that, given some appropriate auxiliary desires, every fact can turn out normative in that sense.[124] Take the fact that most trees are not green in autumn. Together with the auxiliary desire that I want to speak of green trees only if the surface colour of their leaves are green (and not if they have green leaves at other times of the year or if somebody has painted the leaves green), the fact becomes normative for my language use. I ought only speak of a green tree if the tree in question actually has green leaves. This ought is not required by what 'green' or 'tree' (or both) mean, but it is required by a fact plus an auxiliary desire. The hypothetical normativity we get from this is hence not a suitable model for semantic normativity, because it allows any conceivable prescription. Boghossian goes on to emphasise that semantic normativity, the normativity of linguistic content, must be derivable from the mere attribution of meaning to somebody in a straightaway manner. Additional standards and desires cannot play a role.

The notion of derivability Boghossian has in mind also leads him to reject CD and CE normativity. Recall that he is inclined to dissociate linguistic content from linguistic normativity and that questions of priority ensue for him—which commits him to hold that either CE or CD normativity must be correct. If one holds that linguistic content is inherently normative, attributions of meaning to somebody must lead to attributions what one should say and the reason for those further attributions must lie in how one construes content. The derivation of a linguistic ought will draw on necessary properties of linguistic content. But if one holds that linguistic content adopts its normative force from some autonomous normative properties or relations, the derivation must show how some such property or relation can bring it about that one is straightaway licensed to attribute to somebody what she should say

[123] Cf. Kripke 1982:37; recall, however, that I have argued that Kripke is not after a categorical distinction between the normative and the descriptive––he is only committed to the weaker claim that language use is justifiable.
[124] Boghossian 2005:207

based on what she means. If it turns out—as it indeed did—that derivability can neither be guaranteed for CD nor for CE normativity, linguistic normativity can either be seen as a mere philosophical phantasm or, less starkly, as an umbrella term for a variety of phenomena which merely enjoy a family-resemblance to each other.

If we switch from attributions of meaning, which allegedly license attributions of oughts without a need for satisfaction of further conditions, to attributions of beliefs, intentions and other mental states (which are sometimes said to license attributions of oughts in a similar vein) the same problem can be raised for the normativity of mental content. Thus, any sort of content normativity seems to require a good account of how the derivation of oughts, given some specific content, is to be brought about. If it turns out that such a derivation cannot be guaranteed, we should at least be prepared to accept the verdict that content normativity is an umbrella term for a variety of similar, but distinct, phenomena—or reject the notion of mental content altogether.

Boghossian is convinced that the failure of CE and CD normativity conclusively shows that there is no such thing as semantic normativity, because the derivability requirement cannot be fulfilled for linguistic content. But he wants to retain normativity for mental content. How does he argue for it? Consider that it is correct to believe that Obama has won the Nobel price if and only if Obama has won the Nobel price. Can we not argue here that correctness implies an obligation, that one ought to believe that Obama has won the Nobel price if and only if he has won the Nobel price? The obligation here is conditional on the obtaining of a fact and we may argue that we must not generally license inferences from 'it is correct to believe that *p*' to 'one ought to believe that *p*'. But correctly believing requires correctness in a factual sense and we hence ought to believe that Obama has won the Nobel price only if he actually has, i.e. only if there is a fact that makes the belief correct.

While it is not contentious for realists to grant that beliefs are geared to truth and that that yields a notion of correctness for all sorts of beliefs, the idea that the mere obtaining of a fact entails that one ought to believe it is silly. There are many facts which obtain, but knowledge of which can hardly be seen as mandatory in any sense. No realist will want to know all the facts about Charlie Sheen's private life and neither will he want to know how many grains of sand his feet will have touched after a 10 min walk at the beach—there is no good reason for wanting to know these things. We need not believe irrelevant facts simply because there is a truth up for takes.

For Boghossian, this yields the following view of the normativity of mental content, he accepts N1 and rejects N2:

(N1)

One ought to believe p only if p

(N2)

One ought to believe p if and only if p[125]

N2 is clearly ruled out by what I have just said above: the example of irrelevant facts shows that we need not believe all facts simply because they obtain. But in N1, the ought is required by the obtaining of the fact in the weaker sense that some fact may obtain (and guarantee the factual correctness of the corresponding belief) while there need not be a corresponding ought. If there is a belief we ought to have, that belief must, according to N1, be grounded in the obtaining of the appropriate fact—but, on the other hand, the mere obtaining of the fact does not put us under an obligation whatsoever.

It is not clear at all how the "robust realism" Boghossian proposes in his 1989b paper, even if read together with the qualifications in his later papers, can be a realism in a traditional sense. Realism about correct language use in a traditional sense merely requires that semantic and factual correctness be tightly forged together, it is the realism that anti-normativists support. But Boghossian's take on content normativity suggests that factual correctness be tightly forged together with epistemological correctness.[126] Boghossian hence claims that belief formation is subject to epistemic rules and that it is those rules which exert normative force and ensure, like N1, that the objectivity of content is rooted in objective facts. The resulting picture is that objectively correct language use involves a variety of semantic, factual and epistemological elements in order to enable grasping as extrapolating. Boghossian's current writings confirm this:

> [O]ur internalization of general epistemic rules—like Modus Ponens and Induction—explain and rationalize why we form the beliefs that we form. And that seems intuitively correct.
>
> As in the case of our linguistic and conceptual abilities, our ability to form rational beliefs is *productive*: on the basis of finite learning, we are able to form rational beliefs under a potential infinity of novel circumstances. The only plausible explanation for this is that we have somehow internalized a rule that tells us, in some general way, what it would be rational to believe under varying epistemic circumstance.[127]

He is aware that this picture is not yet precise enough. A first question he mentions is: 'What is a rule such that following it is necessary for rational belief?'[128] A second issue is that it

[125] Boghossian 2003a and 2005

[126] This is most obvious in Boghossian's *Fear of Knowledge* (2006).

[127] Boghossian 2008:119

[128] Loc. cit. p. 134

remains difficult to explain how rule-following is possible at all. He writes that he does not know how to answer the first question, but concerning the second he writes:

> It would involve a primitivism about rule-following or rule-application itself: we would have to take as primitive a *general (often conditional) content serving as the reason for which one believes something*, without this being mediated by inference of any kind. It is not obvious that we can make sense of this, but the matter clearly deserves greater consideration.[129]

It seems to me that this is interesting competition for my Wittgensteinian solution to Kripkenstein's sceptic problem. This is mainly so, because Boghossian has a good sense of what is at stake and sees that grasping as extrapolating is the primary *explanandum* in the debates surrounding rule-following scepticism. And when he suggests a primitivism, he is perfectly aware that he must still either explain grasping as extrapolating or reject it as an *explanandum*.

So, to what extent do Wittgensteinians and Boghossian propose a different conception of normativity? Consider again some of the approaches one may take on the normativity of meaning mentioned above:

Bare normativity of meaning

(BNM) *p* is meaningful → there are conditions for the correct use of *p*.

Rule-based normativity of meaning

(RNM) *p* is meaningful → there are rules for the use of *p*.

Add to these conceptions the following two, which appear as new possibilities:

Bare normativity of rules

(BNR) *r* is a rule → there are conditions for the correct application of *r*.

Rule-based normativity of rules

(RNR) *r* is a rule → there are rules for the application of *r*.

It seems clear that Boghossian adopts some sort of RNM, granted that the relevant rules are epistemic rules. What is not clear is whether he would adopt BNR or the potentially circular RNR and if the relevant rules on the right-hand side of RNR are always to be construed as epistemic rules. His proposed primitivism suggests that he prefers BNR and that would require him to supply a corresponding reading of 'conditions for the correct application', so that a rule also specifies the conditions for its correct application.[130] Boghossian has, at least one time, also toyed with the concept of rule-circularity, according to which the rules in question are self-constituting and self-justifying; that would suggest adopting RNR (with a

[129] Ibid.
[130] Ibid.

few additional specifications) instead of BNR.[131] In part B of the thesis we will discuss Boghossian's views on BNR and RNR, but it has been established already that his epistemic rules commit him to a non-Wittgensteinian variety of RNM.

We must add a rider to this reading of Boghossian's position. Whereas N1 and N2 are prescriptions, the epistemic rules Boghossian actually cites do not contain prescriptions but, rather, rational permissions. So, the rules he is after entitle and need not compel. It is not clear what exactly happens if epistemic rules are breached. If I breach *modus ponens* I certainly have failed to infer. And if I breach Boghossian's rule for observation I certainly have failed to observe. From this we may perhaps infer that Boghossian is after constitutive rules. For if he was after mere prescriptions, breaching epistemic rules would mean that one has inferred or observed badly. And that is obviously not the case.

It is important to bear in mind that conservative Wittgensteinians argue for rule-based normativity of meaning and that that involves the concept of internal relations. Wittgenstein seems to suggest that invoking internal relations entails a commitment to say that the relata constituted by the relations are "governed" by a constitutive rule and orthodox Wittgesteinians insist that such a view is still mandatory to make sense of correct language use.[132] I have put the term 'governed' in shudder quotes, because it is not clear to me what it is supposed to mean here.

My preferred construal of internal relations—which is informed by how I read Kripke's views on normativity and dispositions—makes 'governed' redundant and thereby implies that constitutive rules are descriptions of internal relations, i.e. that those rules only have a practical value in explanations and justifications drawing on the obtaining of some specific internal relations. How so? It is certainly true that some rules constitute correct language use. The rule 'male ducks are drakes' and the rule 'female foxes are vixens' establish how 'drake' and 'vixen' are to be used, they set up an internal relation between the words and their use. But there are internal relations which are not set up by constitutive rules. The internal relation between salt's disposition to dissolve in water (but not in benzene) and its actual behaviour in water is not constituted by a rule, but it is itself constitutive of a natural law and that natural law explains and justifies factually correct talk about salt and its solubility.[133]

A more complicated example is the relation between being stung by an insect and saying 'outch'. That relation is internal, for saying 'outch' is to be explained in reference to a

[131] Boghossian 2008: ch. 12
[132] Glock 2003:234 and 2009:163-165
[133] This example is from Graeme Forbes's 1983-4.

moderate pain that is inflicted upon the speaker and a moderate pain is to be explained in terms of pain behaviour such as saying 'outch'. If saying 'outch' loudly is inappropriate in some situation (viz. at a funeral), one can refer to the fact that one has just been stung to excuse oneself. Being excused in such a case involves that other people regard the inapposite 'outch' as inevitable, but the excuse will not amount to a justification under those circumstances. The upshot is that internal relations often constitute semantic correctness and that rules do often describe them. Sometimes, however, internal relations are better explained in terms of natural laws (as in the case of salt's solubility) which in turn govern factual correctness.

This obviously matches my reading of the sceptical solution, for any sceptical solution allows that an indefinitely wide variety of rules can be made to accord with semantically correct language use as long as the relevant defeasibility criteria (which define by exclusion the correctness-conditions of bare normativity) are fulfilled. Any explicit stipulation of defeasibility criteria—for practical purposes—are then effected through providing constitutive rules. So rules are then merely used to draw an interlocutor's attention to the internal relations relevant for semantic correctness. Laws, on the other hand, describe internal relations relevant for factual correctness. Unlike Boghossian, however, I have no special conception of epistemic rules. This leads to a disagreement between us about how the status of logic is to be construed, for logical validity—*qua* logical correctness—can (at least potentially) be analysed as semantic, factual or epistemological correctness. By adding an epistemic rule for belief-formation *modus ponens* to his list of epistemic rules, Boghossian suggests that logically correct reasoning is, first and foremost, epistemologically correct. I, on the other hand, only have internal relations to explain logical correctness. In part B, I shall say more about this and I shall also try to settle the disagreement.

Apart from Boghossian, there are other realists who purport to have genuine alternatives to a Wittgensteinian construal of grasping as extrapolating. I shall continue by introducing the views of Anandi Hattiangadi.

Anti-Normativism

Anandi Hattiangadi's position is a variety of a realist conception of correct language use. She holds that there is no such thing as the normativity of mental content and she is committed to the idea that semantically and factually correct language use are basically the same. Semantic realism, on Hattiangadi's understanding, comprises a commitment to three claims:

1. What someone means or understands by a word (mental representation) can be given by the correctness conditions of the word (mental representation) as it is understood.
2. What someone means or understands by a sentence (mental representation) can be given by the truth conditions of the sentence (mental representation) as it is understood.
3. Ascriptions of meaning to linguistic utterances and mental states are "factual", that is, they can be either true or false, and when true, are true in virtue of objective (i.e. judgement independent) facts.[134]

New here is that Hattiangadi allows correctness-conditions for words. She does neither associate, pace Boghossian, correct believing nor, pace the definition of bare normativity of meaning, semantic correctness with normativity and her notion of correctness is realist in a traditional sense:

> The 'correct' in 'correctness condition' is not obviously an evaluative notion [...]. For the semantic realist, the conditions for the correct use of an expression must be understood as the conditions that must obtain in order for the expression to refer, denote, or be truly predicated of something. The expression 'applies correctly' is a placeholder for the various semantic relations an expression can have to the world: it stands for either '*x* refers to *a*', '*x* denotes *a*', or '*x* is true of *a*'. Thus, if we substitute into the above semantic realist thesis one of the semantic relations for which 'applies [correctly]' stands, there should be no normativity bells ringing: Semantic Realism (reference): *x* means $F \rightarrow$ (*a*) (*x* refers to $a \leftrightarrow a$ is *f*).[135]

The notion of correctness Hattiangadi assumes for single words has it that 'applied correctly to' is synonymous with 'refers to'. On that level, she simply requires factual correctness. Objectivity is hence given, because reference connects a word with an object in the external world, which is generally assumed to contain truths possibly independent of human thought and talk. Epistemic entitlement thus centrally involves successfully tracking those possibly independent facts, but does not affect at all what counts as semantically correct.

How does that compare to competing proposals? She does not, pace Boghossian, assume that there are specific epistemic rules which secure epistemic entitlement in belief formation and which yield, therefore, a notion of the objectivity of content which is only partially footed in external reality. For Boghossian, epistemic rules sufficiently buttress meaning and language use. For Hattiangadi, only facts alone can provide a suitable buttressing. She also finds herself in opposition to Wittgensteinians, because she does not allow correctness and objectivity to be intralinguistic affairs, i.e. correct language use is not only a matter of language or meaning. For her 'what makes the proposition that *p* true is the

[134] Hattiangadi 2007:6-7
[135] Loc. cit. p. 52

fact that *p*' is itself a true claim, that is so because the proposition that *p* reflects (or tracks down) a fact obtaining in the external world. For Wittgensteinians who allow propositions, the proposition that *p* is true just is the same as the proposition that *p* and the statement 'what makes the proposition that *p* true is the fact that *p*' is a conceptual truth by virtue of the conceptual relations between the concept of a proposition and the concept of a fact.

In order to settle the issues between Hattiangadi, Boghossian and the Wittgensteinians, we need to examine semantic realism and the concept of objectivity in much more detail. Without an adequate overview of these issues, the three candidate responses to Kripkenstein's sceptic must be considered to be equal competitors. Establishing such an overview and deciding between the competitors are the tasks of the next part.

Part B

The Objective Grounds of Correct Language Use

1) Objective Grounds

In part A, the problem of correct language use has been introduced. Often, talk of correct language use is ambiguous and different notions of correctness must be kept apart. There is semantic correctness, which stands for correct language use based on what particular expressions mean. Factual correctness stands for correct language use based on getting the facts right. Epistemological correctness stands for correct language use based on having a suitable warrant or justification for one's language use. Starting with Kripkenstein we took semantic correctness to be the central notion of the debate.[136] Arguably, accounting for correct language use centrally involves explaining how an indefinite number of new language uses can be based on a finite number of preceding ones. From that proposal, the more general notion of grasping as extrapolating was extracted as the primary *explanandum*:

> (Grasping as Extrapolating)
> Grasping a rule, a meaning of a word or a concept centrally involves extrapolating a possibly indefinite number of new applications based on a finite number of known cases.

Correctly extrapolating new languages uses need not be a matter of semantic correctness only. Kripkenstein's sceptic insists, as we have seen, that correctly extrapolating is also a matter of epistemological correctness (we must be justified in extrapolating as we do) and that factual correctness also matters (we must get some facts right).

The discussion of Kripkenstein's sceptical paradox (and of some contributions to the debate it provoked) let to the conclusion that there are three competing approaches to the issue—one Wittgensteinian, the other two based on semantic realism. The semantic realist proposals subscribe to a conception of correct language use that takes the factually correct application of linguistic expressions to certain objects to be paradigmatic for semantic correctness. Such realists hence run together factual and semantic correctness:

> Suppose the expression 'green' means *green*. It follows immediately that the expression 'green' applies *correctly* only to *these* things (the green ones) and not to *those* (the non-greens). […][M]y use of it is correct in application to certain objects and not in application to others.[137]

The semantic realist approaches to correct language use hence suppose that such a paradigmatic relation between certain terms and their referents is intuitively intelligible and that it provides a stable foundation for explaining correct language use and grasping as

[136] Kripke 1982:8
[137] First introduced by Boghossian 1989b:148.

extrapolating. They therefore claim that running together semantic and factual correctness is not only the default option, but also provides the best approach to correct language use. More specifically, the paradigmatic relation is seen as either providing facts, which constitute and justify semantically correct language use, or it is seen as guiding language users (in some sense yet to be specified) to such facts. What is the alternative to this?

My Wittgensteinian approach, which rejects that there is a paradigmatic relation between words and objects, is basically a variety of Kripkenstein's sceptical solution. The approach I propose construes correct extrapolations in language use as an entirely semantic matter, because meaning alone is thought to settle what counts as a correct extrapolation of new language uses. Questioning whether a specific extrapolation is semantically correct requires that there be some sort of evidence justifying the question. This requirement is called for, because any semantically correct extrapolation becomes straightaway epistemologically correct unless there is evidence which excludes the extrapolation as incorrect in a semantic (and, *pari passu*, in an epistemological) sense. The proposal takes for granted that extrapolations are normally correct, once meaningful expressions are available at all. And the proposal also takes for granted that explaining what correct extrapolations are involves showing samples of such extrapolations and pointing out what sort of evidence can topple an extrapolation's status as warranted by default (hence excluding the extrapolation as incorrect).

Grasping as extrapolating—at least as far as Kripkenstein's sceptic attacks it—is therefore to be explained in terms of defeasibility, i.e. grasping as extrapolating is to be explained in terms of what does not count as a semantically (and, *pari passu*, as an epistemologically) correct extrapolation. Understanding what an expression means already requires the ability to make semantically correct extrapolations in language use and that ability cannot itself be acquired through explanations, because understanding any explanation already presupposes the ability. This is why all sensible explanations of grasping as extrapolating we can give to counter the sceptic are to be given by drawing on defeasibility criteria for extrapolations warranted by default. The perspective requires a corresponding notion of objectivity, one which does not entail specific metaphysical commitments of the sort that Kripkenstein and Wittgenstein argue against. But how does this contrast with the semantic realists?

First, there is Paul Boghossian's approach. He commends a semantic realism by proposing to conceive of the application of words to objects as paradigmatic for correct language use. Grasping as extrapolating is, however, not fully explained by a general intuition about how words are applied to objects. Boghossian introduces epistemic rules which govern

rational belief formation and those rules secure grasping as extrapolating. Boghossian therefore combines semantic, epistemological and factual considerations to account for correct language use.

Second, there is the position spearheaded by Anandi Hattiangadi who recommends a classical semantic realism. Truth-conditions constitute the meaning of sentences and correctness-conditions constitute the meaning of words. Justification is based on truth. There are no normative properties or relations and, furthermore, rules and their applications have no special role in explaining grasping as extrapolating. Grasping as extrapolating involves successfully tracking truths via the truth-conditions of sentences and correct extrapolations are correct both in a semantic and in a factual sense.

The three positions—Boghossian's, Hattiangadi's and mine—hence disagree about what sort of correctness (semantic, epistemological or factual) determines language use and how different conceptions of correctness ought to (or ought not to) be combined. The three positions do not, however, differ in their explanatory goal: all three seek to explain correct language use in a way that allows us to distinguish between an individual's correctly using language and an individual's merely thinking that she uses language correctly. In other words, the three accounts attempt to explain how language use can be objectively correct: for my Wittgensteinian proposal, this is merely a matter of semantic correctness; for Boghossian, epistemic rules settle what facts determine semantic correctness; Hattiangadi equates semantic and factual correctness and assumes that this automatically takes care of objectivity.

The most prominent disagreement concerns the role of reality and the import factual correctness has. And here we can distinguish two primary camps by asking whether factual correctness plays a role at all. The question allows us to put my Wittgensteinian proposal on one side and the two semantic realist proposals on the other. So we can assess the notion of factual correctness in isolation before taking on considerations independent of factual correctness. The leading question will therefore be whether the concept of objectivity requires that objectively correct language use be accounted for in terms of factual correctness.

It is sensible to start with setting up a framework of concepts that allows us to compare and assess the competitors' proposals more thoroughly. A first concept we must specify more clearly is the concept of objectivity, because everybody agrees that there is a difference between merely thinking that one gets things right and objectively getting things right. To clarify the concept of objectivity, we can start with a platitude. Naturally, objectivity requires that

> the opinions which we form are in no sense optional or variable as a function of

> permissible idiosyncrasy, but are *demanded* of us—[objectivity requires] that there will be a robust sense in which a particular point of view *ought* to be held, and a failure to hold which can be understood only as a rational/cognitive failure.[138]

Note that we are not speaking about opinions in general here. We are considering opinions about any sort of correctness (viz. semantic, factual or epistemological). What opinions we form about any sort of correctness must not be arbitrary and it must not be rigid either.

Objections to this platitude are not difficult to meet. If our opinions were arbitrary, we would never count as recognising or understanding anything, because what we recognise or understand must be communicable and it must be fit to guide our actions in the world. An arbitrary opinion cannot be communicated or guide actions, because it is neither a reliable information nor a reliable basis for deciding or acting. Holding arbitrary opinions rightly counts as a rational or cognitive failure, as it does not involve any sort of recognition or understanding of what actually is. It follows that at least some opinions that rational—or merely cognitively operational—creatures entertain must not be arbitrary.

Another unsuccessful strategy to reject the platitude about objectivity requires arguing that opinions are rigidly formed, that we form them willy-nilly. But if our opinions were formed rigidly, how come that they possibly diverge from other people's opinions? How come that we sometimes reconsider opinions based on a comparison with other people's opinions? Why would we speak of rational or cognitive failures at all if opinions are formed rigidly? We should reject the idea that opinions are formed rigidly, simply because people form wrong opinions about something and others form right opinions about the very same thing and based on the same information.

Even if we held that some opinions are formed rigidly and that others are formed arbitrarily, we still could not make sense of the possibility that people can have right and wrong opinions about the very same thing. The platitude about objectivity is obligatory, as soon as we admit that there is such a thing as a rational or cognitive failure—i.e. as soon as we admit that there is a difference between merely thinking that one gets things right and actually getting things right. We can therefore add that the conception of what counts as getting things rationally or cognitively right forms the basis for determining what opinions are to be formed. This rationalist approach to forming opinions is rather natural and it is hard to see how any serious approach to explaining any sort of correctness (and, thus, grasping as extrapolating) can do without it.

Drawing on the general perspective on objectivity just given, I would like to propose a

[138] I borrow this from Crispin Wright 1992:146 who puts the platitude to a (slightly) different use. He also writes 'commanded' where I have 'demanded'.

particular starting point by asking a question that should concern all parties. Why should language use be correct or incorrect at all? First, there are grounds for saying what one says: we can inform, ask, claim, command or request by saying things in the right circumstances. If there are grounds for saying something, we can hold that what we have said has meaning. If not, there would be no difference between saying something and merely emitting noises. But why should we suppose that there is a difference between correctly and incorrectly saying something? If there were no such distinction, there would be no distinction between actually informing somebody or not, between actually asking something or not, and so on. This does, however, not imply that the distinction is all about succeeding in fulfilling anybody's intention in saying something; the distinction is simply meant to convey the idea that a saying has meaning. When we talk about objectively correct and incorrect sayings, we must be aware that meaning must not straightaway be associated with what speakers intend or what hearers understand. Nevertheless, if there are objective grounds on which we distinguish meaningful sayings from merely emitting noises, these objective grounds might also allow a distinction between correct and incorrect language use. And because a failure to meet what is demanded by objective grounds is a rational or cognitive failure, understanding for a language user—who is rational or (at least) cognitively operational—might already require that one can distinguish correct from incorrect language use on objective grounds.

We are still free to choose with which notion of correctness (viz. semantic, factual or epistemological) we want to associate that conception of understanding. But no matter which one it will be, the requirements on understanding just mentioned are mandatory as long as there is a distinction between merely thinking that a particular language use is correct and it actually being correct. It is therefore absolutely crucial to maintain that there being objective grounds for saying something must not be confused with the idea that anybody's intentions, expectations or motives play a constitutive role for what counts as a saying.

One can say, and that is perfectly ordinary language use, that there are objective grounds that explain why some chemical reaction takes place and these are the very same objective grounds which constitute the difference between regarding one chemical reaction as a whole and as regarding it as a finite number of molecules coincidentally undergoing some changes within a specific time at a specific place. We must look at the difference between sayings proper and the mere emission of noises the same way.

What we get, then, is a rather subtle way of approaching the difference. We speak of sayings having objective grounds, but we must not allow ourselves to admit any constitutive role to some psychological, social, biological, physical or other factors without further

argument. The price we pay for this is that certain sayings will only count as sayings once such further factors are admitted. A good example are the noises some people make while sleeping: unless we have admitted some further criteria, fulfilment of which are warrantedly correlated with ordinary sayings, we cannot claim that some of those noises emitted during sleep have objective grounds and are, thus, sayings.

Sleep talking may hence have objective grounds in an extended sense, because they require further criteria. The objective grounds at hand in this special case might possibly be causal if they have been identified through scientific theorising and evidence gathering. But when we normally say something, we are aware that we are saying it and that we are not merely emitting noises. Such objective grounds of which speakers are aware can be called reasons. Just like objective grounds in general, reasons can be cited in explanations. It is because reasons go together with awareness that any meaningful saying can normally be explained in terms of them. And as saying anything meaningful can be explained, we expect that reasons can be given for saying it. Such expectations are, however, not always fulfilled. Somebody might produce meaningful sayings while sleep talking, in a fever or under shock, but that person need then not have reasons for saying anything at all. It is because of such special cases that I shall prefer to speak of objective grounds only and avoid the concept of a reason.

Objective grounds and explanations are here regarded as interdependent. Again, just as much as there is an explanation for why there is any difference between one chemical reaction as a whole process and a series of coincidental changes in molecules, there should also be an explanation for why something counts as a saying rather than merely emitting noise. And both sorts of explanations are to be given on objective grounds.

We should, however, specify that it is not usually the case that objective grounds are given by citing causal relations. And even where we may adduce causal relations, the platitude about objectivity restricts the causal explanations which are available: the only causal explanations available are those which either presuppose or constitute a viable conception of rational or cognitive failure. As long as the platitude about objectivity remains decisive for what counts as objective grounds, any account of objective grounds is *prima facie* admissible.

The particular starting point which I hence propose in order to enquire into the notion of objectively correct language use can be condensed into a tentative definition of saying: saying something is not merely emitting a noise and the difference between saying something and emitting a noise can be explained based on objective grounds. If construed along these

lines, saying something is not the same as asserting something or as making an utterance. We say ‘hello’ or ‘good bye’ without thereby asserting anything. We may also utter a sigh or a groan without counting as saying anything.

This provides us with a starting point which only insanely strong nihilists cannot accept. Apart from that, (almost) anything goes. Keeping in mind that we refuse to spell out talk of sayings having objective grounds without further argument, scepticism about the possibility of such further arguments is as much a contender as any other proposal.

This leads, despite its minimal requirements, naturally to a platitude about objectively correct language use which is a straightforward application of the platitude about objectivity to the case of language use: language use is objectively correct or incorrect, because the difference between saying something and talking gibberish is not only important for speakers in order to actually say anything at all, it is also important for anybody who hears it as something said, for otherwise she could not distinguish whether something has actually been said or whether she merely heard a noise. This means that all languages can be understood—that there is no language nobody can understand—and it entails that our opinions about what is to count as objectively correct or incorrect language use are not in any sense optional, but demanded of us. A failure to comply with such demands counts as a linguistic failure—one did not say anything at all.

Consider that semantic correctness may be thought to inherit its objectivity from factual or epistemological correctness. Hattiangadi and Boghossian hold views along these lines. The platitude about objectively correct language use is therefore not necessarily committed to *semantic* normativity. Normativity is bound up with objectivity, because it provides a standard for assessing what opinions about (any sort of) correctness count as a rational or cognitive failure. In that sense, obtaining facts may turn out to settle what counts as a cognitive failure, just as much as epistemological rules may determine what counts as a rational failure. The way objectivity enters the picture here is not meant to suggest anything specific about the concept of semantic normativity.

Of course, we may not straightaway apply all elements of the platitude about objectivity to the case of language use. We would need further arguments if we wanted to equate a linguistic failure with a rational or cognitive failure. Nevertheless, what has been said so far provides us with a first account of how objectivity affects language users: a language user’s opinions about what counts as objectively correct or incorrect language use are not optional, but demanded. A failure to meet linguistic demands is commonly associated with a rational or cognitive failure.

Again, we should refuse to spell out the term ‘demanded’ in any way without further argument, for that directly turns on whether one wants to spell out correctness in a semantic, a factual or an epistemological sense. It must hence also remain open whether the objective grounds on which sayings are distinguished from mere noises are semantic, factual or epistemological grounds. It is of utmost importance for what follows below that these boundaries are not breached thoughtlessly.

Now, it seems that all three competing conceptions of correct language use—my Wittgensteinian proposal and the two varieties of semantic realism—can indeed accept the points just gathered. All three are committed to the idea that language use can be explained and that what counts as objectively correct or incorrect is based on objective grounds of some sort. Their interpretation of the details, however, differs.

My Wittgensteinian approach holds that we must take our explanatory practices at face value and that, once we have the concept of an internal relation available, such explanations can usually count as justifying language use, rule applications and concept applications without any further requirement to ground it in anything else. Due to the internal relations constituting meaning and language use, the conception of objectivity relevant for language use collapses into semantic normativity. Boghossian disagrees and points out that our explanatory practices must instead be grounded in epistemic rules and facts about the external world in order to count as justifying. Hattiangadi concurs with the second part of Boghossian’s rejoinder: facts about the external world justify the application of a term, but epistemic rules are not necessary to make sense of that.

It now appears that Hattiangadi has a heavy explanatory burden when objectivity comes into play. Any semantic realist rejecting semantic normativity cannot afford to straightaway reject the importance of objectivity in language use—and the notions of rational and cognitive failures and demands that come with it. Why is that so? Assume that language users have objective grounds they are aware of for how they use their language and that those grounds justify their use. Then, it is sensible to suppose that being justified in using language in a particular way entails that it is objectively the case that this particular use is semantically correct. Language use is justifiably correct if and only if such a justification ought to be acceptable by all other language users—the justification would not be objective otherwise.

If this holds for Hattiangadi’s proposal, then the epistemology of meaning necessarily requires the normative notions of a failure and of a demand in order to explain objectively correct language use (in a semantic sense of ‘correct’). It now becomes hard to see how a proponent of the view that meaningful content is not normative can accommodate the idea

that the epistemology of meaning requires objectivity without jeopardising the platitude that the epistemology of meaning is an important aspect of the meaning of 'meaning'. In other words, as long as Kripkenstein's justification question—as introduced as an integral requirement on viable conceptions of correct language use in part A—is to be answered, the objectivity constraint is mandatory and anti-normativists must explain how accounting for that need not involve notions connected with semantic normativity.

I think, however, that anti-normativists are prepared to pay a high price to get out of that sort of trouble. They might claim that getting things right is not something that is demanded from us, because there are neither rational, cognitive nor linguistic requirements to be met at all. This bizarre claim dissociates factual correctness of language use from human cognition, rationality and, paradoxically, from language use itself! Although such a claim must sound crazy to anybody concerned with the distinction between sense and nonsense in language use, anti-normativists might be prepared to argue for it in order to dodge the sort of objections from objectivity just mentioned. Arguments against anti-normativism as a candidate account of correct language use must therefore be independent of objections from objectivity. They will not be watertight otherwise.

Note that only flat-footed anti-normativists have difficulties with the concept of objectivity. Boghossian turns out to be fully aware of what objectivity requires and caters for it by introducing epistemic rules. For him, semantic correctness inherits objectivity from factual correctness which, in turn, is mediated by epistemic rules. There is, therefore, nothing harmful for him in the notion of objectivity that was introduced above.

In what follows, I shall first focus on the anti-normativist who wants to bypass objections from objectivity by claiming that there are no rational, cognitive or linguistic requirements on what can count as objectively correct language use. In order to do so, we shall turn to Michael Dummett's views on how meaning and factual correctness hang together. This will allow us to assess semantic realist proposals more thoroughly.

2) Dummett on Realism and Antirealism

With these general considerations in the background, we can start enquiring into objectivity in a more direct manner. We have to consider strategies for developing the starting point which I have summarised in the following way: saying something is not merely emitting a noise and it can be explained on objective grounds. Recall that I have supplied it with an objectivity constraint: a language user's opinions about what counts as objectively correct or incorrect

language use are not optional, but demanded.

On might want to gather from this that there is an asymmetry between factual and semantic correctness, because objectivity concerning opinions about facts is distinct from objectivity concerning opinions about meaning. After all, a whole community might be wrong about what facts obtain, but—being speakers of a language—they can hardly be wrong about meaning. So, what exactly is the explanatory surplus of factual correctness? Does objectively correct language use require that certain facts obtain autonomously of human language (and, possibly, thought)? Asking such questions means to engage in a debate between realists and antirealists about the facts in question; the former are taken to argue for the autonomy of the facts, while the latter deny this. If facts are not autonomous, issues of factual correctness in language use collapse into issues about epistemological or semantic correctness.

Note that approaching factual correctness along these lines may be thought to miss out a position which was to be included in the debate. Scepticism about the possibility to spell out the conception of a saying as having objective grounds by introducing some further concepts cannot accept any question which leads to realism-antirealism disputes. Facts about language use—linguistic facts—are to be accounted for only in terms of sayings having objective grounds; engaging in a realism-antirealism dispute is, according to that approach, not required to distinguish between a language user's opinions about language use and linguistic facts. All that is required, so the story goes, is a firm grasp on the concept of sayings having objective grounds.

Some find motivation in Wittgenstein's later works to claim that there is a difference between semantically correct and incorrect language use, but deny that metaphysical considerations play any decisive role in those works. They may take that as a reason to reject realism-antirealism disputes altogether and argue that linguistic facts are merely facts about how language is used. For them, there is nothing more to be said about linguistic facts than that. Such a reading of Wittgenstein is an instance of the sort of scepticism I wanted to allow when I established the starting point just recalled above. Here is a prominent voice:

> [P] articipants in the current disputes about realism and anti-realism make much of the claim that casting (or more accurately, miscasting) as many philosophical problems as possible in the framework of 'realism' and 'anti-realism' has far-reaching metaphysical implications. The achievement of this re-arrangement is held to be that it shows that the theory of meaning underlies metaphysics. This contention alone should have sufficed to show that something is deeply awry with presenting Wittgenstein in this setting. For he thought that the very idea of a theory of meaning is an absurdity, and adamantly denied that he was propounding one. Furthermore, he thought that metaphysics was *at best*

> disguised grammatical trivialities, and more commonly simply nonsense. Any suggestion that Wittgenstein's philosophical clarifications have metaphysical consequences is a sure sign that they have been misconstrued.[139]

It should be clear that Wittgenstein's views may have metaphysical consequences even if he did not intend them to. But I shall not explicitly deal with the exegetical question of whether the very idea of linguistic facts (and the realist or antirealist ways of spelling them out) is compatible with Wittgenstein's reflections on meaning and rule-following. What I shall do instead is introduce Michael Dummett's views on understanding and what it is for a speaker to know a language, how that relates to realism-antirealism debates and why remaining close to the starting point I have introduced is a genuine alternative.

Below I shall provide arguments for being sceptical about the relevance of realism-antirealism debates to explaining semantic correctness and grasping as extrapolating. It will turn out that factual correctness cannot sufficiently ground semantic correctness. I shall also express worries about the very possibility of theories of meaning. But nevertheless, the arguments presented below are mainly meant to put pressure on any semantic realist's view that factual correctness explains something crucial about objectively correct language use. The following dissection of Dummett's views is hence supposed to merely aid the exposition of those arguments.

Achieving the goals just mentioned is not an easy task. We should bear firmly in mind that there is a loophole for the realist which sceptics about the value of realism-antirealism disputes notoriously downplay. The idea that there is an internal relation between understanding a proposition on the one hand and knowing what would be the case if it were true, on the other hand, is not only available to Wittgensteinians. The idea of such an internal relation is also available to those realists who claim that true propositions simply are obtaining facts—and that is a classical claim amongst realists interested in language use. Of course, propositions must then count as fully expressible by declarative sentences and by that-clauses. Another constraint is that meaning and understanding be explained in terms of internal relations, which propositions and what makes them true merely exemplify without assuming a paradigmatic status. If such a view turns out to be available, realism is fully compatible with my Wittgensteinian proposal and, as I shall explain, the possibility of genuine realism-antirealism debates also ensues.

So, the big question is whether a realist is at all committed to hold that factual correctness governs (or is to be conflated with) semantic correctness. A further question is

[139] Hacker 1986:334-5

whether epistemological correctness is, as Boghossian holds, connected with factual correctness, because we should aim at believing only what is the case. It is, as will be argued, not a trivial matter to conceive of how the boundaries between semantics, epistemology and metaphysics are to be drawn. And even if such boundaries can be drawn, will it help to make sense of objectively correct language use in general? These difficult issues are the topic of the remainder of the present part of thesis.

Language, Truth, and Meaning

Fortunately enough, Dummett's approach to realism and antirealism needs not be introduced and motivated from scratch in the present context. In a way, the rule-following debate and how it gave rise to the realist conception of correct language use—which conflates semantic and factual correctness—catapults us right into the heart of Dummett's philosophy. The discussion about how meaning-facts are to be construed played the central role in part A of the present thesis. According to Dummett, that discussion must eventually become one about whether realism about meaning-facts is viable and how a language user can come to objective opinions about them. The discussion so far suggests that we should indeed follow Dummett here.

So, how to approach linguistic understanding? A language user's understanding of any saying, transmitted through whatever medium, is tacit. That is to say that she need not be able to explicitly relate this understanding, a simple explanation like 'that is how utterances in this language are understood' suffices for non-philosophical purposes. Such tacit knowledge requires that language users possess a certain competence or practical ability which enables them to understand a language and hence informs production and reception of the language. Looking back at the starting point proposed above, we should expect an ability to use language non-arbitrarily to produce sayings based on objective grounds. We must hold that a language user takes her language use to be explainable—even if all that might be produced as objective grounds is a simple 'I've always said that' or, referring to a community of language users, 'That's just how we speak'. It is the ability to use a language, her linguistic competence and understanding, which explains why such simple explanations count as citing objective grounds at all. A full account of linguistic competence will be given in part C of the thesis, were everything will be centred around these issues, but it is important to bear in mind that present discussions already show that a clarification of the concept of linguistic competence is mandatory.

We usually say that language users know a language. As the term 'knowledge' already suggests that such an understanding is objective, all we need to account for is its relation to facts, once we have spelled out what that understanding comes to. If we can, that is. For Dummett, knowledge of language is practical knowledge, but it is also propositional knowledge (which explains the former). In other words, knowing a language means implicitly knowing a set of propositions which characterise that language. A theory of meaning, then, explicitly relates those propositions and thereby explains what mastery of a language amounts to. Dummett writes:

> Our problem is, therefore: What is it that a speaker knows when he knows a language, and what, in particular, does he thereby know about any given sentence of the language? Of course, what he has when he knows the language is practical knowledge, knowledge how to speak the language: but this is no objection to its representation as propositional knowledge; mastery of a procedure, of a conventional practice, can always be so represented, and, whenever the practice is complex, such a representation often provides the only convenient mode of analysis of it. Thus what we seek is a theoretical representation of a practical ability. Such a theoretical representation of the mastery of an entire language is what is called by Davidson, and will be called here, 'a theory of meaning' for the language; Davidson was, perhaps, the first to propose explicitly that the philosophical problems concerning meaning ought to be investigated by enquiring after the form which such a theory of meaning for a language should take.[140]

I shall not discuss Donald Davidson's proposal about how the practical ability in question can be represented. But we must note that the idea that knowledge of language is propositional leads Dummett directly to claim that a theory of meaning has to represent a body of knowledge that is at the same time propositional and tacit. Propositional knowledge is knowledge that something is thus-and-so and if this knowledge is also tacit, speakers tacitly know that something is thus-and-so. So speakers do supposedly know that certain things are thus-and-so without being aware that they know it. This claim is utterly strange, because it makes scant sense that speakers should ever surprise themselves by how they use language. So, what is wrong with that take on knowledge of language?

Tacit propositional knowledge, tacitly knowing that something is the case and tacitly identifying what is the case at the same time, depends on a one-way power to recognise facts. One-way powers like that are passive cognitive powers that are not subject to human volition, for if they were, they could not be tacit in the sense Dummett requires. But knowledge of language, qua ability to use language, is subject to human volition, because speakers can

[140] Dummett 1976:36

intentionally misuse language no matter what the (linguistic) facts are. Speakers can simply decide to utter a nonsensical sentence, lie (i.e. utter something factually incorrect) or breach standards of politeness—anything goes as long as they are prepared to live with the consequences. So, the ability to use language is a two-way power, subject to human volition.[141] It is presumptuous to assume right from the beginning that a theoretical representation, like a theory of meaning, can account for anything that is subject to human volition. This is so, because whatever is subject to human volition can be changed on a whim and accounting for that possibility would involve giving an account of (at least part of) human volition—and that is notoriously difficult. Justifying such an assumption requires, even if it was possible, much more than Dummett delivers. As Dummett's proposal stands, he has simply made a category mistake by not distinguishing between one-way and two-way powers.

For those not already convinced by this, part C of the present thesis will provide more arguments against Dummett's conception of knowledge of language as propositional. For the time being, we should be as generous as possible (for the sake of argument) and assume that a theory of meaning is supposed to explain a good deal—but not everything—of what sort of ability, qua two-way power, I have if I know a language. Such a theory, then, is not supposed anymore to represent the contents of the propositional knowledge of a language that a competent speaker has, but is expected to explain some central points of what knowledge of language (qua having an ability to use language) comes down to in theoretical terms.

Dummett considers three ways of approaching meaning: truth-conditional, verificationist and falsificationist. All three give truth and falsity a role to play, but only the first takes it that truth and falsity can fully explain knowledge of language. They are great specimens with which one can explain the relation of semantic and factual correctness, because they clarify the role factual correctness can possibly play in accounting for objectively correct language use.

The Truth-Conditional Conception of Meaning and Understanding

How can questions surrounding correct language use lead to the proposal that truth and falsity can explain knowledge of language? Dummett thinks that language use may involve an operator which requires that what it modifies be true or false.[142] John says 'the cat is on the mat' and Jeff may want to say that that is wrong, because the cat is in the kitchen. He can now negate the thought expressed by John and say 'it is not the case that the cat is on the mat'.

[141] This take on powers is drawn from Hacker 2007, who adopts it from Kenny 1976.
[142] Dummett 1990:192

Negation is an operator which requires, according to Dummett, that what it modifies be true or false. Hence, any language with negation fulfilling that function will require talk of truth and falsity to explain the tacit knowledge involved in the use of, at least some, sayings. I shall call anything said which is truth-evaluable a statement. Understanding a statement can hence be equated with knowing when the statement is true or false, with knowing, that is, the statement's truth-conditions. This is the first candidate reason one might have to assume that truth and falsity can explain knowledge of language.

This first idea takes it that negation modifies contents of statements and that those contents are fully explained in terms of truth-conditions. Strictly speaking, negation thus conceived just reverses truth-conditions of statements. But what if negation in a language can also be used to emphasise another negation, as in "I did not do nothing wrong"? It is sometimes admissible and perfectly understandable that the speaker of such an utterance wants do say that he did nothing wrong and not that he did everything right. So, it is not always the case that negation reverses truth-conditions.

The problem here is twofold. First, the proposal attempts to explain how truth-conditions are involved in understanding statements. Nothing is said whether we can deduce anything from this for imperatives, questions and other meaningful sayings. Second, there are statements containing negations, which do not reverse any truth-conditions. We thus need, pace Dummett, a better reason.

Here is the second candidate reason. When we first think about cases where we can distinguish factually correct from incorrect language use we naturally stumble across observation reports and other cases of perception-based assertion. Reporting 'there is a tree' when seeing one does usually not require much to find out whether uttering that sentence was a case of factually correct language use. We simply have to check whether there is a tree. In certain more complicated cases, we may also want to check whether there are plastic trees, miniature trees, tree-like shapes and the like in the vicinity in order to warrant the report as factually correct. We may even want to enquire into the cognitive state of the speaker, the meteorological circumstances and other factors to add warrant. At any rate, it appears that correctly asserting 'There is a tree' means stating something true and incorrectly asserting it means stating something false. And as we have already argued that the distinction between objectively correct and incorrect language use is mandatory for meaning, we can infer that truth and falsity are also mandatory for meaning. Adding that only statements can be true or false, we come to hold that truth and falsity are mandatory for the meaning of statements and that, for them, semantic and factual correctness go hand in hand. *Tout court*, we draw a

conclusion for meaning in general based on the finding that factual and semantic correctness fall together for observation statements and maybe also for other perception-based assertions.

We may then go on to formulate a first conjecture about the practical ability to utter and understand observation reports. It seems sensible to say that the practical ability solely consists in an ability to recognise under which circumstances observation reports like the statement 'There is a tree' are true and when they are false. We thus reduce the meaningful content of the statement to that which makes it truth-apt—its sense—and subtract the force with which that content is expressed—its assertoric, imperative, interrogative or subjunctive force—in the tokening of the statement. Following Dummett's reading of Frege, we can then use this model to approach whole languages:

> If we apply a Fregean sense/force analysis to our sentences, we see the sentence as falling into two parts, that which conveys the sense of the sentence (the thought), and that which indicates the force which is being attached to it, assertoric, interrogative, imperatival, etc. It is the thought alone which is, from this standpoint, properly said to be true or false, whether we are asserting it to be true, asking whether it is true, commanding that it be made true, or whatever else. On such a view, therefore, someone who asks a (sentential) question or gives a command can be said to be saying something true or false with as much right as one who makes an assertion; and it is as much of a solecism to call the *assertion* 'true' or 'false' as it is to call a question or command.[143]

According to this model, any sort of language use, be it asserting, asking or commanding, depends on something particular being the case and, maybe, other things not being the case in order to make it meaningful language use. Whatever is meaningful about it expresses a thought which can be true or false and only expressions of true thoughts will count as instances of correct language use. This point can be made more concisely: any meaningful saying involves stating something, even though implicitly. This unmasks the seemingly innocuous habit of calling assertions true or false: they are as aberrant as calling questions and commands true or false. Knowing a language hence eventually boils down to knowing how to coordinate sounds and signs on the one side with true thoughts on the other. That also entails that for every string of signs and for every sequence of sounds the competent language user should be able to decide, based on the occasion, whether it expresses a true thought or not and, if not, what it possibly contributes to the truth or falsity of a thought. It now seems that this is a simple and useful way of accounting for knowledge of language; call it the truth-conditional conception of meaning and understanding.

Now, according to this view understanding meaningful statements is basically nothing

[143] Dummett 1976:47

else than recognising under what circumstances they are true or false. Such recognising can obviously be described in terms of what somebody knows. It is hence appropriate for a proponent of truth-conditions, that knowledge of language is construed as propositional knowledge. So it could appear that my initial worries about construing knowledge of language as propositional language must not necessarily impress somebody who favours a truth-conditional approach, because a truth-conditional conception of meaning and understanding need not be committed to tacit propositional knowledge of the sort I objected to. It seems to be enough if a language user recognises whether the circumstances she is in makes a statement true or false—a case of non-tacit knowledge.

Still, proponents of such a truth-conditional conception of meaning and understanding happily affirm that the propositions I know when I know a language can in principle also be believed, intended, liked, disliked etc., as such a view naturally flows from the assumption that the meaningful content of each of these attitudes can be described in truth-conditional terms. But it is precisely here where the pernicious combination of propositional content plus tacit knowledge reappears. The propositional (i.e. meaningful) content of these further states is also tacit, because the truth-conditions constituting it are usually tacit. After all, it makes little sense to suppose that people are aware of the truth-conditions that constitute the meaningful contents of their intentions or desires. Even if one holds that people can always, and as a matter of principle, come to recognise them, not everybody will be able to recognise or formulate the sort of complex theoretical representation that Dummett is after. We are back with the question we already put to Dummett: how is it to be explained that language use is subject to human volition and that, at the same time, knowledge of language is tacit and propositional? My objection hence still stands, a truth-conditional conception of meaning and understanding can hardly be said to explain all aspects of human language use.

Semantic realists obviously endorse truth-conditional conceptions of meaning and understanding, regardless of how they assess content-normativity. Boghossian's conception of language use also reveals a nostalgic attitude towards truth-conditions. For him, the contents of statements are given through their truth-conditions and the meanings of words are determined by the conditions of their factually correct application, both of which—in turn—are governed by epistemic rules. The other realist view—Hattiangadi's anti-normativism—endorses a more traditional semantic realism, because it does not make use of epistemic rules. Any finding about truth-conditions, how they might explain objectively correct language use and what their relation to realism is, can thus be expected to have an upshot for the two semantic realist conceptions of correct language use. Having said this, what are the standard

worries with truth-conditions and their explanatory value regarding language use?

One first worry is that we get two notions of correct language use due to the sense-force distinction. One notion of correctness is used to tag expressions of true thoughts. We may call it correctness on the level of sense, which simply is semantic correctness explained in terms of truth-conditions. The other notion of correctness is used to tag appropriateness of force. We may call it pragmatic correctness. When I ask, pointing at a tree in a garden full of beeches and elms, 'Is that a beech or an elm?' that question is to be counted as correct in both ways. But if I command the tree 'You be a beech or an elm!', people would be startled, because it is hardly appropriate to talk to trees like that under normal circumstances. Nevertheless, whatever thought I have expressed may, according to a proponent of truth-conditions, be true. 'You be a beech or an elm!' may contain a true thought, because the tree one is commanding is a beech or an elm. But the utterance will always be incorrect in a pragmatic sense. 'You be a beech or an elm!' is thus quite a clear case of a saying for which the two notions of correctness (i.e. semantic and pragmatic) can come apart. But 'You be a beech or an elm!' is a nonsensical utterance, it appears meaningless, as it is hard to understand how it can be meaningful merely because it contains the true thought that a tree in a garden full of beeches and elms is either a beech or an elm. Semantic correctness in truth-conditional terms cannot fully determine whether 'You be a beech or an elm!' is nonsensical unless pragmatic correctness comes to its aid. So, why should we draw a distinction between sense and force if, at the end of the day, both are needed to decide whether 'You be a beech or an elm!' is nonsense or not? It appears that the sense-force distinction does not at all dissect language use at its joints.

That first worry can be countered by admitting that the term 'knowledge of language' actually covers two distinct practical abilities; one to express true thoughts and one to express them appropriately. The first is investigated under the heading 'semantics' and the other is investigated under the heading 'pragmatics'. If simplicity initially seemed to be a virtue of the truth-conditional approach, it cannot be said to be one anymore, for we just complicated the *explanandum*. One might even add that making such a distinction between semantics and pragmatics does not help at all, that it means missing the real issue, for we do not explain what it is to know a language unless we explain how one manages to coordinate the ability to express true thoughts and the ability to do so appropriately. Such an objection makes much of the idea that knowledge of language does not only—and certainly not centrally—involve expressing truth-evaluable thoughts, because pragmatics is just as important as semantics for understanding what knowledge of language is. Otherwise, 'You be a beech or an elm!' cannot

be identified, due to knowledge of English, as a nonsensical speech act. So, the whole approach of driving a wedge between semantics and pragmatics seems misconceived. But still, that first worry can only be developed into a fully convincing argument if we have an alternative conception of knowledge of language, which does not drive a wedge between semantics and pragmatics. In that case, we would argue against truth-conditional approaches that a better explanation of the phenomena is available.[144]

Dummett himself, because he sees no reason to abandon the sense-force distinction, has another sort of objection in mind. Consider whether the following assertions express true thoughts and what sort of conditions would make them so:

1. If nobody likes this place, a city will never be built here.
2. On the 3rd June 1973, the tree in front of my house had an even number of leaves.
3. The expansion of Π contains twelve consequent 9s.

While there might be conditions which make the three statements true or false, Dummett is more interested in the fact that we do not know whether they are decidable, because we cannot (in a finite time) 'bring ourselves into a position in which we were justified either in asserting or denying' the statements.[145] Truth-conditional conceptions of meaning and understanding now seem to entail a puzzling claim about understanding. We can form and understand these statements, but there is no way we could actually decide whether they state true thoughts, as we cannot possibly apprehend the sort of conditions that could make them true or false. The problem is that truth-conditional conceptions demand that every thought expressed through a statement be either true or false—that is the principle of bivalence—and it also demands that knowledge of a language be explained in terms of the conditions under which we assign truth and falsity to statements. But these three examples illustrate a possible shortcoming in the case of undecidable statements. According to Dummett,

> there are three principal sentence-forming operations which are responsible for our capacity to frame undecidable sentences: the subjunctive conditional; the past tense (or, more generally, reference to inaccessible regions of space-time); and quantification over

[144] Baker & Hacker 1984a/b have argued at length that Frege's reasons for introducing the distinction between sense and force are bogus and that the proponent of truth-conditions, and any other meaning-theorist who takes the distinction for granted, commit the same mistake by simply taking Frege's word for it. Defenders of truth-conditions have argued that it may in fact be possible to spell out the proposal in a way, which is sensitive to appropriate language use (for discussion of the problem, as it was posed in Lewis 1975, see Schiffer 1993 and Kölbel 1998). They claim that they can account for how we coordinate the ability to express true thoughts and the ability to do so in an appropriate way. But if Baker & Hacker are right, this sort of strategy cannot adequately deal with the worry, because it does not tackle the objection that the sense-force distinction was bogus in the first place. Sophisticated defenders of truth-conditional meaning-theories (viz. Lewis, Schiffer and Kölbel) simply assume without further argument that we can live with it. But should we assume that that is enough? This is an important further question that must be asked if any truth-conditional approach passes muster.

[145] Dummett 1978:16

> unsurveyable or infinite totalities. Now the claim that we tend to appeal to the mastery of observational sentences as a model for the knowledge of the truth-conditions of a sentence is borne out by our surreptitious, or sometimes explicit, appeal to such a model when sentences involving these operations are in question. Since the sentences in question are not in principle decidable, the observations which we imagine as being made by some being with a different spatio-temporal perspective, or whose observational and intellectual powers transcend our own, such powers being modelled on those which we possess, but extended by analogy.[146]

Some realists may be prepared to submit that our understanding of such statements depends on our ability to extrapolate from decidable cases in order to come up with a specification of the sort of conditions we need to speak of truth and falsehood. They should therefore also concede that the truth of a thought and, hence, the correct use of language can possibly transcend any speaker's ability to decide whether that is so—call this principle 'possible verification-transcendence'. This is, of course, merely a different way of expressing the problem of grasping as extrapolating. So, here appears a serious difficulty for anybody suggesting that truth-conditional conceptions of meaning and understanding are in a good position to answer Kripkensteinian scepticism: the concession that our abilities to extrapolate are limited and that, at the same time, there is always a correct further extrapolation does not at all suggest a solution to Kripkensteinian scepticism, but is an open invitation for such sceptical doubts.

How precisely does this affect the two realist approaches to semantic correctness? Hattiangadi bypasses the issue of possible verification-transcendence, even though it is precisely what semantic realists like her must explain to answer Kripkenstein's justification question and to successfully account for objectively correct language use.[147] In other words, she deliberately neglects discussing the one trait of truth-conditional conceptions of meaning and understanding which openly invites sceptical worries of the Kripkensteinian sort! Dummett's way of phrasing the problem makes it clear that semantic realists are not in a position to straightaway assume that a truth-conditional approach has the means to successfully explain grasping as extrapolating. It is therefore urgent for the anti-normativist branch of semantic realism to meet this challenge. But now, pressure does not only come from the Kripkensteinian side, but also from Dummettian worries concerning how one can understand a statement, the truth-conditions of which are possibly verification transcendent.

Boghossian, who is more sensitive to these issues, explicitly claims that there is a

[146] Op. cit. p. 60
[147] Hattiangadi 2007:2, footnote 2

possibility that appealing to epistemic rules solves the issue.[148] Dummett himself considers buttressing a truth-conditional approach with such auxiliary principles. Introducing Dummett's proposal now will allow us to assess Boghossian's prospects more clearly in a later section.

Dummettian Verificationism: Intuitionism Besieges Theories of Meaning

Dummett develops the second approach to meaning from his criticism of the truth-conditional conception of meaning and understanding. What, he thinks, is most unsatisfactory about it is how it uses the concepts of truth and falsity to explain meaning. On the basis of assigning truth-conditions to statements, we classify them, depending on the conditions in which they are made, as true or false. But such a classification, he claims, can only explain anything if there is a point in making the classification over and above simply recording the conditions in which it is true or false:

> Classifications do not exist in the void, but are connected always with some interest which we have, so that to assign something to one class or another will have consequences connected with this interest. A clear example is the problem of justifying a form of argument, deductive or inductive. Classification of arguments into (deductively or inductively) valid and invalid ones is not a game played merely for its own sake, although it *could* be taught without reference to any purpose or interest, say as a school exercise. Hence there is really a problem of showing that the criteria we employ for recognising valid arguments do in fact serve the purpose we intend them to serve: the problem is not to be dismissed—as it has long been fashionable to do—by saying that we use the criteria we use.[149]

In application to meaning theories, we need to ask why we assign truth or falsity to a statement and we also need to ask what sort of principles license such classifications in general. Simply recording its use in truth-conditional terms will, as we have just argued, not do. As meaning theories aim at accounting for tacit knowledge, Dummett assumes that our tacit knowledge somehow contains the point of classifying statements. We should thus expect that an alternative theory of meaning also explains how we are justified in assuming that our words do have the meanings they have. We should, to put Dummett's point in my terminology, ask on what grounds we take language use to be correct or incorrect in an epistemological sense, because correctness (i.e. truth for statements) often requires warrant.

[148] Boghossian 2008:134
[149] Dummet 1959b: 3

This is most naturally addressed by focusing on how we decide the truth-value of a statement and that, in turn, may be addressed by asking how we decide whether a form of argument is valid or not.

The second approach to knowledge of language to be introduced here operates with principles which allow us to decide whether an instance of language use is epistemically correct or not. The whole point of the new proposal is that we should adduce epistemological considerations about correctness, because merely conflating factual and semantic correctness is not sufficient. If we again focus on assertions, we can, for the sake of simplicity, still speak of truth and falsity of statements. But on the second approach, truth and falsity will not be playing the same centre-stage role as in full-fledged truth-conditional conceptions of meaning, for they can only play any role in so far as they are decidable according to the principles we decide to operate with. Factual and semantic correctness are thus to be buttressed with considerations about epistemological correctness. The model starts out from the intuitionistic account of the meaning of mathematical statements:

> The fundamental idea is that a grasp of the meaning of a mathematical statement consists, not in a knowledge of what has to be the case, independently of our means of knowing whether it is so, for the statement to be true, but in an ability to recognize, for any mathematical construction, whether or not it constitutes a proof of the statement; an assertion of such a statement is to be construed, not as a claim that it is true, but as a claim that a proof of it exists or can be constructed. The understanding of any mathematical expression consists in a knowledge of the way in which it contributes to determining what is to count as a proof of any statement in which it occurs. In this way, a grasp of the meaning of a mathematical sentence or expression is guaranteed to be something which is fully displayed in a mastery of the use of mathematical language, for it is directly connected with that practice.[150]

Note the role that practice plays here. Understanding an expression means understanding the role it plays in constructing a proof for any statement in which it occurs. The practice referred to here is a practice of having some particular ways of warranting one's use of a language and it is exactly those ways of warranting which will also explain the formation of statements out of more basic expressions.

The truth or falsity of a statement will have a different weight as soon as we leave mathematics behind and look at other scientific discourses.[151] This is easily seen in the case of any empirical statement for which we cannot have absolute warrant that it is true, but where

[150] Dummett 1976:70
[151] Cf. Dummett 1963: 163

all we can affirm is that it is probably true. A Higgs boson, for example, is the only particle of the Standard Model in particle physics that had never been observed directly, but it has been claimed recently that the Large Hadron Collider, a particle accelerator, made it possible to warrant that at least "higgs-like" bosons exist. But whatever evidence will be produced with the accelerator, the statement 'Higgs bosons exist' need only be probably true, as not many physicists these days will expect the statement to have meaning unless it is determinately true or false.[152] This is simply because research in particle physics is conducted in probabilistic terms and it is highly controversial whether those terms have to be understood in truth-conditional terms in order to be meaningful at all. A certain particle is normally deemed to exist if it occurs with a particular frequency in some specific experimental setting. It suffices for practical purposes that the probabilistic terms are useful without any further explanation of their meaning in truth-conditional terms. So, would it not be ridiculous if a philosopher of language corrected the language use of the physicists operating the Large Hadron Collider because it does not comply with his favourite conception of meaning? If you find it ridiculous, you may count the example as another objection against truth-conditional conceptions of meaning. Otherwise, you will have to argue that understanding and meaningfully employing probabilistic terms in particle physics requires that every statement in such terms be reducible to a statement in truth-conditional terms for which the principles of bivalence and possible verification-transcendence hold. I shall not claim here that such a reduction is impossible, but I do think that it shows at how high a price the truth-conditional approach has to be bought—and, to boot, what attitude towards non-philosophical research it ultimately expresses.

There are two possible ways of clarifying the role of the concept of warrant in Dummett's second approach. A first way is to take the role of proof for the meaning of mathematical statements seriously and to find something that fulfils an analogous role in natural language use. A second way (it will be discussed in the next section) builds on the idea that being warranted may simply mean that defeasibility criteria are not fulfilled, i.e. that for a statement which counts as default-warranted there is no evidence which shows that it is in fact not warranted.

Let us concentrate on the first role of the concept of warrant for the moment. According to this view, understanding any statement means that we can either decide, in principle, if its utterance is correct, if it is not or if we cannot decide it at all. Understanding a

[152] Einstein was notorious for insisting that statements in particle physics are determinately true or false, no matter whether we know it or not. Such a perspective, informed by classical determinism, is not something many contemporary physicists adopt.

statement, grasping its meaning, means that we know in principle how to verify the correctness or incorrectness of its application or, at least, how to verify that we cannot decide it. To know in principle how truths are established does not mean that we actually can do so, only that we are able to recognise when a truth can be counted as established. This is a verificationist approach to meaning commonly associated with Michael Dummett. He writes about how to arrive at a verificationist theory of meaning, starting from the intuitionist construal of mathematical statements:

> Proof is the sole means which exists in mathematics for establishing a statement as true: the required general notion is, therefore, that of verification. On this account, an understanding of a statement consists in a capacity to recognize whatever is counted as verifying it, i.e. as conclusively establishing it as true. It is not necessary that we should have any means of deciding the truth or falsity of the statement, only that we be capable of recognizing when its truth has been established. The advantage of this conception is that the condition for a statement's being verified, unlike the condition for its truth under the assumption of bivalence, is one which we must be credited with the capacity for effectively recognizing when it obtains; hence there is no difficulty in stating what an implicit knowledge of such a condition consists in—once again, it is directly displayed by our linguistic practice.[153]

Consider again the three undecidable statements which pose a challenge for the truth-conditional approach:

1. If nobody likes this place, a city will never be built here.
2. On the 3rd June 1973, the tree in front of my house had an even number of leaves.
3. The expansion of Π contains twelve consequent 9s.

How can Dummett's verificationist deal with them? Well, after considering them carefully he may come up with a way of deciding for at least some of such cases that he cannot decide whether these sentences are true or false. Nevertheless, he has a way of deciding whether a sentence is decidable and, hence, an understanding of those sentences according to verificationism. For such sentences, we will have an account of what it is to understand them, but the principle of bivalence does not hold, because we have verified their undecidability. Now, as the principle of bivalence is part of classical logic, we have to revise our logic if it is to remain metaphysically relevant. That is to say that if we want a logic which can adequately deal with thought and talk about reality, we cannot adopt any logic which does not allow for undecidable statements.[154]

The general strategy for dealing with undecidable statements is adopted, again, from

[153] Dummett 1976:70-71
[154] Cf. op. cit. pp. 75-76

intuitionism and how it deals with very large or infinite totalities in mathematics. Dummett makes explicit that the intuitionist commits himself to the concept of potential infinity and that that concept requires that the mathematician grasps some general principles governing the analysis of statements involving infinity:

> [A] proof of a universally quantified statement will be an operation which, applied to each natural number, will yield a proof of the corresponding instance; and, if this operation is carried out for each natural number, we shall have proof of denumerably many statements. The conception of the mental construction which is the fully analysed proof as being an infinite structure must, of course, be interpreted in the light of the intuitionist view that all infinity is potential infinity: the mental construction consists of a grasp of general principles according to which any finite segment of the proof could be explicitly constructed. The direction of analysis runs counter to the direction of deduction; while one could not be convinced by an actually infinite proof-structure (because one would never reach the conclusion), one may be convinced by a potentially infinite one, because its infinity consists in our grasp of the principles governing its analysis. Indeed, it might reasonably be said that the standard intuitionistic meanings of the universal and conditional quantifiers involve that a proof is such a potentially infinite structure.[155]

The verificationist is thus committed to hold that understanding undecidable statements of the form presented will involve that the competent language user grasps some general principles which govern the analysis of such statements. The appeal to generality should account, in the case of mathematics, for the fact that we understand potential infinitude; in the case of natural languages, it can only be meant to account for the fact that we can verify whether any statement is potentially decidable. The commitment to general principles results, for the verificationist, in a view of the knowledge of language according to which we tacitly know how to verify whether any statement we encounter is potentially decidable—and that should be, something that happens (given how quickly we understand language) in an astonishingly short time. Verificationism hence builds on weighty presuppositions about how much cognitive labour lies behind the knowledge of language.

For a verificationist, the general principles of verification license an extrapolation of new correct language uses based on a finite set of correct language uses. But sceptical doubts about whether I grasp the general principles of verification that justify one use rather than another are still possible. A Kripkensteinian sceptic may always claim that I grasp an alternative principle of verification which is compatible with the finite set of correct language

[155] Dummett 1973: 242

uses from which I extrapolate, but which renders incorrect the answer I deem correct. So, we may not want to understand warranted language use in this way, as simply assuming such large amounts of cognitive labour going on tacitly may seem hasty (or even preposterous)—especially since Kripkenstein's sceptic lurks in the background. There are therefore good reasons to suppose that in natural languages, warrant is not obtained by conclusive verification even though one may be convinced that, in the case of mathematical statements, it is actually obtained by proof. Does Dummett have another option?

Falsificationism as an Alternative?

So far, we have focused on the correctness-conditions of assertions, rather than on their incorrectness-conditions, in order to clarify the relation of meaning and truth which exercised Dummett so much. The reason for doing so was that the sort of assertions we have in observation reports are fully explained by saying under what conditions or based on what verification-principles one can warrantedly report what one sees. In the case of assertion, then, one warrantedly says what is the case and correct language use depends on that. It is in this sense that correctness can be thought to explain assertion. But does it? If that were right, somebody who constantly and exclusively asserts what is obvious (because he does not want to say anything incorrect) would exhibit a full understanding of assertion. It seems odd to say he does, because understanding assertions also involves being aware under which circumstances it is inapposite to assert the obvious. The reason is that assertions do not exclusively report what is and, sometimes, whether they are correct does not matter much as long as they are not incorrect. This latter idea is exemplified by the assertion that there is an infinitude of stars. The assertion that there is an infinitude of stars need not be correct to pass muster in a conversation as long as it is not (warrantedly) incorrect. So it seems that accounting for the correctness conditions of assertions requires more pragmatic considerations than supposed so far. Does this indicate anything new concerning correct language use in general? It seems, as will be argued, that Dummet thinks so.

Dummett reminds us explicitly that '[s]aying something false and saying something neither true nor false are two distinct ways of making an incorrect assertion'.[156] It goes without saying that there is only one way of making a correct assertion and that is by saying something true. So it seems that the incorrectness-conditions of assertions are more informative than the correctness-conditions. Characterising assertions in terms of their

[156] Dummett 1991:49

correctness-conditions only will miss this point and that will of course seem particularly interesting (and upsetting) for Dummett's verificationist for whom undecidable statements merit a place in logic. But even if incorrectness-conditions were more informative, does that additional information really help clarifying the meaning of assertions?

Let me give two examples to boost some intuitions about how assertions are used. John expects Jeff to be late and takes his time while getting prepared. I am all ready to go and I am also getting upset with John, because he is, I think, intentionally wasting time. Jeff has, without my knowing, just left his office, but it is not sure whether he will make it in time. I assert 'Jeff is coming on time' and am thus saying something neither true nor false, because it is not sure that he will make it in time. In that case, I simply want John to get ready faster. It is more important for me that John speeds up than that my report was right.

If 'correct' is to mean 'serves a legitimate purpose', my assertion was correct and it can be explained in terms of its correctness-conditions. Even though correctness must have something to do with what is the case, namely facts about whether Jeff can make it in time, the assertion's correctness will collapse into its serving a legitimate purpose, for there are no facts about whether Jeff can make it. But we should not want to explain the meaning of such an assertion purely in terms of speakers' (legitimate) purposes, for that would deprive the notion of correctness of its status as marking objectively correct language use.

In order to come up with a more refined notion of assertion that safeguards the objectivity of correctness through preserving its connection with truth, we can hold that the assertion 'Jeff is coming on time' is objectively not incorrect if there are no facts about whether Jeff can make it, but still serves a legitimate purpose. That refined notion has it that my utterance 'Jeff is coming on time' has a meaning which is determined by objective incorrectness-conditions even in cases in which there are no discernible facts about whether Jeff can make it. For such cases, the assertion is objectively not incorrect, because it serves a legitimate purpose and unless there is evidence suggesting that there is no such purpose, the assertion's status as objectively not incorrect cannot be toppled and making the assertion remains warranted by default.

The example pushes intuitions, which present the correctness of assertion as a borderline case between semantic and pragmatic correctness without letting it collapse into language users' purposes. This is something anybody should welcome who felt that the truth-conditional conception of meaning illegitimately drove a wedge between semantic and pragmatic correctness and who were wary about appeals to principles of verification. Still, one might insist that the example just conflates semantic and pragmatic issues and for them it

still remains to be shown what this discussion of assertion amounts to.

Dummett writes that assertions are not like answers in a quiz programme, which we should expect if correctness was the fundamental notion in explaining assertion as a linguistic act.[157] Assertions are, usually, also guides to action for the hearer (just as, Dummett claims, judgements are 'guides to action on the part of the thinker') by inducing certain expectations in her. Expectations, on the other hand, often have their content determined by what surprises us. In other words, expectations are not to be explained by what fulfils them in the most usual cases, but by what is not in accord with them. In the example, John's expectation, induced by my assertion, that Jeff comes soon would result in surprise if Jeff took 10 more minutes.

Wittgenstein proposes an analogous take on expectations in the *Philosophical Investigations* § 577. He writes that 'I expect him' means the same as 'I would be surprised if he did not come' when we believe that he comes, but are not preoccupied by whether he does. The use of the word 'expect' in such cases can thus be adequately explained by what would surprise us. So it seems that Dummett and Wittgenstein are after an exclusionist account of expectation here: listing what would count as a surprise amounts to saying what would count as not fulfilling the expectation and if that fully characterises the expectation, the expectation has been explained in terms of what the expectation excludes as a surprise or a frustration.

But how exactly does this help with explaining meaning and, especially, the objectivity of language use? The idea is, so Dummett's line of thought, that we can learn something about assertion here, which the other two approaches (viz. truth-conditional and verificationist) neglect. Nevertheless, caution is required, because if expectations are meant to be more than merely analogous to assertion, we might jeopardise objectivity again, for language users' expectations should not count too much for what correct language use comes down to. And even if there is merely an analogy between expectations and assertions, is it not problematic that the contents of our expectations are not always transparent to others while the contents of assertions must be transparent to others if they are to understand it at all?

There is no sign that Dummett wants to throw the notion of objectivity overboard. All that he is after is the intuition that there may be an interesting asymmetry between correctness and incorrectness. In an early classic paper, Dummett draws on an analogy between asserting and obeying a command.[158] If the assertion turns out to be incorrect, I have to withdraw it, but nothing further happens. As long as it does not turn out to be incorrect I can, as was just argued, take as established what it asserts and act on it. Something similar is true in the case of obedience. There are no further consequences if I correctly comply with an order, but there

[157] Dummett 1976:82
[158] Dummet 1959b:8-12

are if I disobey. Correctness and incorrectness are asymmetrical in these cases, because asserting and obeying are only fully explained by reference to what consequences follow if one incorrectly asserts or disobeys. Explaining these concepts in terms of correctness only will miss that aspect and as correctness can be introduced in terms of incorrectness, a full explanation of these concepts can be made in terms of incorrectness alone. And so we should, for the other options cannot accommodate these observations about assertion and disobedience. Truth-conditional approaches to meaning and verificationism construe correctness either as not requiring any consequences—certain things just have to be true—or, in the case of verificationism, as verifiable, which can require that certain consequences obtain, but that is not mandatory. So the whole discussion of assertion amounts to arguing that there is an asymmetry between correct and incorrect language use and that we should investigate further whether we can gain a better analysis of meaning and understanding from this, because what we mean by an utterance and how we understand something has consequences and these consequences are also (at least in part) constitutive of meaning and understanding. How, then, does Dummett characterise this alternative approach to meaning and understanding? And more precisely, how must the notion of a consequence be understood here?

On the assumption that assertion has a central place in language use, we can now formulate the third approach to meaning. The remarks about assertion have a clear upshot for Dummett:

> These considerations prompt the construction of a different theory of meaning, one which agrees with the verificationist theory in making use only of effective rather than transcendental notions, but which replaces verification by falsification as the central notions of the theory: we know the meaning of a sentence when we know how to recognize that it has been falsified.[...] [A] falsification theory does not relate the meaning of a sentence directly to the grounds of an assertion made by means of it at all. Instead, it links the content of an assertion with the commitment that a speaker undertakes in making that assertion; an assertion is a kind of gamble that the speaker will not be proved wrong.[159]

In his *The Logical Basis of Metaphysics*, Dummett calls the falsificationist conception of meaning and understanding a pragmatist theory and writes:

> A pragmatist meaning-theory, whose central notion is that of the consequences of a statement […], is less readily envisaged [than a verificationist meaning-theory], principally because of the dependence of the consequences for a subject of accepting a

[159] Dummett 1976:83-84

> statement as true upon his contingent purposes and wishes. There is, nevertheless, no reason to suppose that a suitable notion of consequences, independent of individual desire, cannot be disentangled and made the basis of a meaning-theory.[160]

Note here that a falsificationist/pragmatist theory offers an account of the sort of knowledge we have when we know a language which is rather different from what the other two approaches to meaning attempt. The truth-conditional conception makes claims about how we tacitly connect statements to conditions in which they are true. Verificationists have to specify by what general principles we tacitly decide whether the truth of a statement is established (or any linguistic act is appropriate). Falsificationist explanations of what it is to know a language will only have to specify under what conditions statements are false—and what it is to thereby breach a commitment.[161] It does not provide a full representation of what it is to know a language, it only marks, so to say, its borders by recording when it fails. It does, however, require a suitable notion of consequence independent of individual desires if it is to account for objectively incorrect language use as we require it.

Nevertheless, the falsificationist approach might provide a simpler way of accounting for how undecidable statements are understood—once a suitable notion of consequence has been found—as it only has to list situations in which they count as incorrect language use. There will be no further claims about the cognitive command of language users or the obtaining facts of an external reality in understanding such statements.

The falsificationist approach that Dummett suggests here is similar to the exclusionist strategy against the sceptical paradox that we have found in Kripkenstein's sceptical solution in part A. The main differences are that Dummett focuses on assertions and that he introduces his falsificationism as a possible basis for a theory of meaning which fully explains knowledge of language. We should doubt that such a theory can be erected on the falsificationist basis Dummett proposes. The main reason for such doubts is that a full characterisation of language use (and the meaning of any linguistic expression contained in it) cannot be given in terms of what counts as (objectively) incorrect language use, because we cannot systematically check every particular instance of language use and we must give up the idea that the correctness of language use is directly related to what is the case. Especially having to give up the idea that correctness often directly depends on what is the case is a deplorable feature of Dummett's falsificationism. While truth-conditional approaches construe reality and language as too tightly interwoven, falsificationism spins in a void,

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[160] Dummett 1991:320

[161] Recall that Dummett introduces falsificationism by examining the difference between correct and incorrect assertions.

because by only excluding incorrect language uses, we never arrive at linguistic expressions which do directly and objectively refer to what is.

Recall, the exclusionist strategy was devised to secure self-ascriptions of meaning something by a linguistic expression against Kripkenstein's sceptic. It did not profess that it can be the basis for a theory of meaning. But there is, one might argue, something else it can do. We may, pace Dummett, find that detailed enquiries into meaning are empirical enquiries which are to be conducted within linguistics—and not within philosophy—anyway. The exclusionist strategy could perhaps be used to argue that research in linguistics is not subject to Kripkensteinian worries if it fulfils a certain requirement. The requirement would be that any research programme within linguistics is committed to an exclusionist strategy against the sceptical worries and that the same exclusionist strategy can be used to make sense of the difference between objectively correct language use and purportedly correct language use. It is a philosophical task to show that the requirement can be fulfilled, but it may be an entirely linguistic task to give a more detailed analysis of meaning, understanding and knowledge of language afterwards.

One problem with this way of promoting an exclusionist strategy is that it does not explain grasping as extrapolating. There are linguistic extrapolations of language users in novel situations and at least some of them can count as correct and others count as incorrect—that is nothing we can explain in terms of the consequences of taking some extrapolations as correct and others as incorrect. The problem is, of course, that exclusionism must presuppose that there are already extrapolations available for which we can set out the consequences of taking them to be correct or incorrect. In other words, anything that can count as a consequence or that can count as having consequences must be characterised independently of the consequences.

Another problems is that it is not at all clear what 'consequence' means here. Exclusionists must come up with a suitable notion without presupposing any sort of content which can be the consequence of another content (and vice versa). So it seems that exclusionism is bound to commit a petition fallacy if no further assumptions about content are made. And these further assumptions must necessarily be independent of what can be explained by exclusion.

We now have gained sufficient background knowledge of Dummett's views on language, truth and meaning and on the problems involved in the sort of knowledge language users have because they know a language. This allows us to introduce Dummett's famous approach to realism and antirealism and to achieve a more detailed story about semantic

realism. It is, however, already clear that Dummett's writings, as considered so far, provide good reasons to be very sceptical about the viability of semantic realist approaches—it seems more plausible that a different proposal is required if issues surrounding objectivity and justification come into view.

Meaning, Realism and Antirealism

A dispute between realists and antirealists about a fact is *prima facie* a dispute in metaphysics. It is a dispute about the reality of the fact and about its place in the world. How come that Dummett's theories of meaning are thought to form the background for such metaphysical issues? The missing link here is Dummett's conception of philosophy:

> Only with Frege was the proper object of philosophy finally established: namely, first, that the goal of philosophy is the analysis of the structure of *thought*; secondly, that the study of *thought* is to be sharply distinguished from the study of the psychological process of *thinking*; and, finally, that the only proper method for analysing thought consists in the analysis of *language*. As I have argued, the acceptance of these three tenets is common to the entire analytical school; but, during the interval between Frege's time and now, there have been within that school many somewhat wayward misinterpretations and distortions of Frege's basic teaching, and it has taken nearly a half-century since his death for us to apprehend clearly what the real task of philosophy, as conceived by him, involves.[162]

Chances are that Frege did, in fact, not hold this view about philosophy, but that is not to be discussed here.[163] Dummett's conception of analytic philosophy has it that scientists, mathematicians for example, are interested in establishing the truth or falsity of statements, e.g. mathematical statements, whereas philosophers are rather interested in how statements are endowed with sense, i.e. meaning.[164] It is based on this view that he gives the enquiry into meaning a central role in philosophy:

> [T]he theory of meaning is the fundamental part of philosophy which underlies all others. Because philosophy has, as its first if not its only task, the analysis of meanings, and because, the deeper such analysis goes, the more it is dependent upon a correct general account of meaning, a model for what the understanding of an expression consists in, the theory of meaning, which is the search for such a model, is the foundation of all

[162] Dummett 1975c:458
[163] Compare Baker & Hacker 1984b where the issue is discussed.
[164] Cf. Dummett 1975c:443

philosophy, and not epistemology as Descartes misled us to believing.[165]

I shall not discuss whether Dummett is right about what analytic philosophy is.[166] More interesting for present purposes is the upshot of this for the metaphysical debates between realists and antirealists. As antirealism is defined as any position which does not accept realist claims as readily available and true, the characterisation of realism and its prospects will be of primary importance. Dummett claims that realism, as a position in metaphysics, produces nothing but metaphors unless the realist's tenets are couched in terms of what she means when she makes metaphysical claims. The realist, then, has a specific theory of meaning based on which she engages in metaphysical disputes and the antirealist must have an opposing theory in order to have any say at all.

Now, the realist about the external world, to take a popular example, claims that facts about the external world are independent of thought and talk. If there were no such independence, it would be nonsense to speak of the world being external. What theory of meaning can the realist now employ to live up to Dummett's standards and become a semantic realist? She will have to claim that the understanding of undecidable statements about the external world consists in one's grasp of their truth-conditions, she will, hence, adopt a full-blown truth-theoretical conception of meaning and understanding. All disputes between realists and antirealists will become disputes about what understanding some class of statements, which are not known to be decidable, comes down to.

Take the statement 'The expansion of Π contains twelve consequent 9s'. It makes sense to ask whether it is true and, hence, under which conditions it would be so. Still, it is undecidable, because we cannot expect to bring ourselves in a finite time into a position in which we can justifiably assert or deny it; we can't even justifiably say that it is impossible to decide whether there is such a position. The semantic realist about statements concerning properties of Π claims that the statement is determinately either true or false and that the truth-conditions are possibly verification-transcendent, for we might indeed have no means to decide the matter. A semantic realist about a class of statements does thus commit herself to the principle of bivalence and to the principle of possible verification-transcendence.

Note that the principle of bivalence is not fully explained unless it is added that any

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[165] Dummett 1973/81:669

[166] But let me say something about why I do not engage with this. Nowadays, many professional philosophers who are considered analytic philosophers do not at all comply with Dummett's standards, famous examples comprise Robert Stalnaker and Gareth Evans. Furthermore, the very idea that there is or has ever been such a thing as the analytic school has come under attack (cf. Glock 2008). It is far from clear how Dummett's position can withstand scrutiny if we examine the variety of what philosophers, who are deemed to be analytic philosophers, actually do.

statement be not only true or false, but be determinately so:

> The principle of bivalence is not fully expressed merely by saying that every statement is either true or false: it is the principle that every statement is *determinately* either true or false. What is the force of qualifying a disjunction by the adverb 'determinately'? [...] [T]he idea may be expressed by appeal to the concept of knowledge: if, determinately, one of two possibilities holds, then, if someone neither knows that the first possibility holds nor knows that the second one does, there is something that he does not know. This may be put in terms of God's omniscience: God must know which of the two possibilities holds, that is, must either know that the first one does or know that the second one does.[167]

Explained in these terms, we immediately perceive that the principle of possible verification-transcendence is, according to Dummett, contained within the principle of bivalence. The second is sufficient for the first, as the semantic realist holds that whether a statement is true or false is determinately so, no matter what we could possibly verify. But is that an entirely semantic issue? If the principle of possible verification-transcendence is perceived as an epistemological principle and the principle of bivalence is perceived to be a semantic principle, we may be led to assume that Dummett's position views semantics and epistemology as tightly interwoven. I do not think that this is a natural way of reading Dummett. His insistence on the primacy of meaning-cum-truth theories for all of analytic philosophy must imply that the principle of possible verification-transcendence is, at least for a semantic realist, a semantic principle and not an epistemological one (even though adopting it has epistemological consequences). Making this assumption also allows us to consider the exact relation of semantics and epistemology in a second step after the status of metaphysical issues has been clarified. The dialectical option of dissociating possible verification-transcendence from bivalence will be discussed more thoroughly below.

In some analogy to the discussion about whether truth-conditions can be the sole basis of a viable theory of meaning, the semantic realist has to face two main arguments: 1) the acquisition argument and 2) the manifestation argument. The first questions how it is possible that we have acquired an understanding of undecidable statements if such an understanding involves grasping potentially verification-transcendent truth-conditions which we learn to recognize as obtaining when they obtain. The second argument questions how we can manifest that understanding in actual language use if our use is only responsive to conditions which we recognize as obtaining when they obtain.[168]

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[167] Dummett 1991:75
[168] Cf. Miller 2006:984-6

In the following sections I shall discuss an objection against Dummett's characterisation of realism-antirealism disputes. One can ask whether it is possible to sever the link between Dummett's conception of philosophy as centrally concerned with theories of meaning and his views on realism; this will also involve asking whether semantic considerations still contribute to the issue if the relevance of theories of meaning for metaphysics is rejected. If theories of meaning prove irrelevant to metaphysics, realist-antirealist disputes may become entirely metaphysical disputes again. But even in that case there are, as I shall argue below, some semantic or epistemological constraints on metaphysical disputes that must remain nevertheless. I shall then explore such alternative constraints on metaphysical disputes.

The overall aim is to argue that we must not conflate meaning-theoretic and metaphysical issues. More specifically, I shall argue against realist conceptions of correct language use that their semantic realism is of no avail to secure a suitable notion of objectivity and that a common sense realism should not require a semantic realist conception of correctness either. It will deal the death blow to the anti-normativist realist proposal, because they illicitly assume that their appeal to factual-cum-semantic correctness-conditions automatically secures objective justification and, conversely, that a common sense realist must adopt their particular brand of correctness-conditions. After that, only Boghossian's robust realism plus epistemic rules and my Wittgensteinian proposal remain.

Miller on Truth-Conditions and Reality

The most important worry about Dummett's characterisation of realism is, of course, that it is always to be a *semantic* realism. This ensues from Dummett's view that a philosopher's task is to analyse the meaning of statements in metaphysics and other areas. But if we engage in metaphysical discussions, we want to talk about what things there are in general and what their nature is. To many contemporary metaphysicians, the idea that we merely engage in a particular dispute about semantics when arguing about metaphysics is not at all appealing. In order to make explicit what goes on behind the curtains, Alexander Miller has introduced the notion of a worldview:

> A worldview consists of at least a *metaphysics* (an account of what there is and its nature in general), an *epistemology* (an account of how we can possess knowledge of the objects and properties included in the metaphysics), and a *semantics* (an account of how we can talk and think about objects and properties included in the metaphysics). A *plausible* worldview is a worldview in which each of the components is itself plausible, and in

> which the components are at least mutually compatible. […] An alternative to Dummett's conception of the relationship between the theory of meaning and metaphysics could be spelt out as follows: it is the job of philosophy to find a worldview in which the various elements, metaphysical, epistemological, and so on, are individually plausible and mutually integrated, and in carrying out this job no one of the various aspects, metaphysical, epistemological, semantic, and so on, has any *a priori* priority over the others.[169]

I shall shortly consider arguments to the effect that semantics, construed as being about theories of meaning only, has no *a priori* priority over metaphysics. But I shall also argue that there are good reasons to assume that some epistemological or semantic (although not meaning-theoretic) considerations still constrain the domain of sensible metaphysical discourse.

Realism-antirealism debates, if construed as purely metaphysical disputes (within an appropriately restricted context), turn out to simply address questions like the old 'Does a falling tree in the forest make a noise if nobody hears it?' and such debates then appear to be debates about what is independently of thought and talk. That is a very natural way to frame those debates; whether it is viable is another issue.

Alexander Miller's arguments against Dummett are meant to take a step in that direction. He attempts to sever the bonds between truth-conditional theories of meaning and realism about the external world by showing that a plausible realism need not be committed to such a particular conception of meaning and understanding. Dummett, on the other hand, takes any sensible realism to be committed to truth-conditional theories of meaning. If Miller can come up with a conception of realism which is intuitively appealing and which is not committed to such a theory of meaning, he will have shown that being a realist does not require adopting that specific theory of meaning and that not every realist need be a semantic realist. The upshot for issues surrounding correct language use—at least as perceived by semantic realists like Hattiangadi—will then be that factual and semantic correctness are not to be conflated until it has been shown conclusively that one's realist views license (or even necessitate) specific semantic commitments.

Instead of considering realism about stones, tress, tables, physical forces, molecules, social systems, currencies and governments, we can (for our purposes) just consider a forthright realism about the external world. Once that passes muster, it will be a further question what we want to be part of that world. Here is Miller's proposal:

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[169] Miller 2006:988-989; there is a stronger position that metaphysics has an *a priori* priority over the others. Below I argue that metaphysics is subject to semantic constraints and I hope to apply this insight to the stronger position in a future paper.

(Common-Sense Realism)

Tokens of most current observable common-sense and scientific physical types objectively exist independently of the mental; and they possess some properties which may pass altogether unnoticed by human consciousness; and their innermost nomological secrets may remain forever hidden from us.[170]

Now, the big question is whether a proponent of common-sense realism is committed to a truth-conditional conception of meaning and understanding. According to Dummett, the answer is 'yes'. For him, common-sense realism and a truth-conditional conception of meaning and understanding form a packet deal which he calls semantic realism and he advances arguments against it, namely the acquisition and the manifestation argument. But what if they are not necessarily a packet deal, for some proponents of common-sense realism turn out not to be committed to such a theory of meaning? What do the acquisition and the manifestation argument argue against in such a case? If Dummett's arguments against semantic realism turn out to be compelling, we would have a new option. We could either reject common-sense realism or truth-conditional theories of meaning. The mere conceivability of rejecting either in such a case shows that Dummett's arguments against semantic realism can be used to argue that an intuitively appealing realism is not committed to a truth-conditional theory of meaning.

Dummett's main arguments against semantic realism challenge the idea that the following three assumptions—which are all constitutive of Dummettian semantic realism—cohere:[171]

1. Understanding a statement is a matter of grasping its truth-conditions
2. Truth is epistemically unconstrained
3. Understanding a statement means possessing a complex of practical abilities to use it correctly

The truth-conditional conception of meaning and understanding commits the semantic realist to assumption 1, because it links linguistic understanding with the principle of bivalence. This assumption by itself is sufficient for Dummettian semantic realism. To see this, consider that at least one reading of assumption 2 follows from assumption 1 due to the possible verification-transcendence of truth-conditions that the principle of bivalence implies. And that is the big question for anti-realists: is the notion of truth subject to bivalence? Assumption 3 follows from assumption 1 only if it is read as a platitude constraining how grasping truth-conditions is related to correct language use—philosopher's with a different story about

[170] Op. cit. p. 990

[171] Cf. Miller 2006:1001, who follows Wright 1993.

understanding will, of course, not associate assumption 3 with assumption 1.

Assumption 2 has two readings. It can be taken as ensuing from the principle of bivalence and thus as simply expressing the principle of possible verification-transcendence. Assumption 2 is then confined to the idea that the truth-conditions of an undecidable statement are possibly verification-transcendent. Alternatively, the assumption can be taken to express the idea that some truths about the world or facts in the world are as they are independently of thought and talk. On that reading, assumption 2 does not follow from assumption 1—the principle of bivalence—but must be held for reasons independent of assumption 1. Note that a semantic realist will be happy to endorse the first reading (i.e. that assumption 2 follows from the principle of bivalence). A common sense realist, however, might commit himself to the second reading. He will then endorse assumption 2 because he is a realist and not because he also happens to endorse a specific theory of meaning.

Assumption 3 is platitudinous within the semantic aspect of any worldview. In the discussion of Dummett's views on theories of meaning, we have seen that the relation between the understanding of a statement and its use can be construed in different ways, but that any theory of meaning must explain the relation. There are, no matter what theory of meaning one endorses, two questions that must be raised about the relation:

(i) How can we acquire an understanding which allows us to use a statement as we do?

(ii) How can we manifest such an understanding in language use if it is to be tacit?

The semantic realist has a problem with both questions, because it is not clear how understanding statements can involve grasping truth-conditions which possibly transcend our epistemic capacities and how we can nevertheless acquire and manifest such an understanding in language use. Therefore, the commitment to all three assumptions leads to serious difficulties for semantic realism. With semantic realism thus having bleak prospects, what are the consequences?

If common-sense realism is joined with the idea that the semantic aspect of a worldview has no *a priori* primacy over the metaphysical aspect, the rejection of truth-conditional theories of meaning will only involve rejecting assumption 1. This is the view Alexander Miller holds, because he argues that a justification of assumption 2 does not require appeal to the semantic aspect of a plausible worldview:

> The most natural place to look for [...] a justification of the idea that the truth of 'There is intelligent life elsewhere in the universe' as potentially evidence-transcendent would be in some story about the nature of the universe, its capacity to furnish us with evidential traces of intelligent life, and how those evidential traces might dissipate before they ever

reach the earth.[172]

It is one thing to argue that assumption 2 does not require appeal to a theory of meaning, which systematically determines unique semantic values for statement-types. That amounts to arguing that it is not the principle of bivalence which leads us to hold that truth is epistemically unconstrained, but that there are independent reasons. The more general idea that assumption 2 does not require any appeal to the semantic aspect of a plausible worldview is very contentious, because anything that can possibly count as true or false (viz. statements, propositions, contents of judgements or thoughts) is intimately related to language and meaning. It is therefore completely natural to assume that the concept of truth belongs to the semantic aspect of a plausible worldview, even if no theory of meaning may assume a monopolistic attitude towards the details of the concept's application.

Realists and antirealists can agree on certain facts about how the concept of truth is to be applied. Such an agreement can render assumption 2 acceptable for both parties and the agreement need not amount to an agreement on a theory of meaning. The particular agreement I have in mind here simply consists in acknowledging the fact that the predicates 'is true' and 'is warrantedly assertible' do not have the same extension. (Note that the antirealist may still hold that 'is true' and 'is potentially warrantedly assertible' have the same extension.) Consider again the following two statement-types:

- 'It is not the case that *P*' is true if and only if it is not the case that '*P*' is true.
- 'It is not the case that *P*' is warrantedly assertible if and only if it is not the case that '*P*' is warrantedly assertible.

The second statement-type fails, as I have argued in section 1.3 of part A, if read right-to-left. When I am in a dark misty alley and I see something moving in front of me, it might not be the case that 'there is a rat' is warrantedly assertible, because it might be something else. And this does of course not necessarily entail that 'it is not the case that there is a rat' be warrantedly assertible. On the other hand, 'there is a rat' being false does indeed entail that 'it is not the case that there is a rat' is true. So a partial agreement between realists and antirealists can consist in conceding that truth is not reducible to warranted assertibility—and that is simply a reading of assumption 2 which is not wedded to a specific theory of meaning.

This alternative reading of assumption 2 requires some semantic considerations to get off the ground, because the partial agreement on truth rests on considerations concerning the extension of the predicates 'is true' and 'is warrantedly assertible'. If assumption 2 is retained, because realists and antirealists can agree on an at least partially common conception of truth,

[172] Op. cit. p. 1003; note that this response is also available to somebody who endorses a realist conception of truth and a verificationist conception of meaning.

semantics will retain some sort of priority over metaphysics, because it furnishes metaphysics with important insights about the concept of truth. But the semantic consideration is not wedded to any particular theory of meaning in Dummett's scheme of things.

Is it a problem for anti-realists that 'is true' does not always have the same extension as 'is warrantedly assertible'? No, an antirealist can still argue that 'is true' has the same extension as 'is possibly warrantedly assertible'. This does, however, not necessarily amount to rejecting assumption 2—the idea that truth is epistemically unconstrained. If one knows what would possibly warrant a claim, he knows what would in principle justify asserting the claim and he knows by what means he might possibly attain it. Taking Miller's example 'There is intelligent life elsewhere in the universe', an antirealist can hold that there must be evidence for settling the truth-value of the statement and that he knows how he could possibly attain it. If there is no possible way to attain any evidence which settles the truth-value of the statement, he must insist that the statement has no truth-value. This means refining the idea that truth is epistemically constrained: one then holds that truth is not constrained by that for which one has warrant, but one holds that truth is constrained instead by that for which one knows—in principle—how to obtain warrant (even if one cannot actually obtain it for practical reasons). This view is obviously not compatible anymore with a weaker conception of truth as epistemically constrained, which simply renders the predicates 'is true' and 'is warrantedly assertible' as having the same extension.

But where does this lead us? On the one hand, rejecting this new reading of assumption 2 is certainly not an option, because it would amount to rejecting common sense realism and once that is gone, the best reasons for keeping truth-conditional theories of meaning out of doors are gone as well. On the other hand, we still want to allow realism-antirealism debates about certain matters—but we also want to keep them independent of the issues surrounding Dummettian theories of meaning. Luckily enough, an antirealist opposing common sense realism can, as we have just seen, put other constraints on the concept truth. So we may insist that realism-antirealism debates are possible independently of debates about theories of meaning. It is clear that the semantic considerations just introduced provide the right grounds and that they are not necessarily meaning-theoretic. But even if assumption 2 can be motivated by these alternative semantic considerations and if genuine realism-antirealism debates within metaphysics have indeed become possible again, can issues of priority between semantics and metaphysics also be settled by considerations along these lines?

Let us take a particular case. Think of an argument in metaphysics which, based on a

set of premises P1-Pn and an implication (P1-Pn) → C, concludes that C obtains. Assume that C is the controversial statement 'All possible worlds are just as real as the actual world'. The argument can be read as a *modus ponens* which establishes C and it can be turned around and be read as a *modus tollens* which establishes that at least one of the premises P1-Pn is false based on the allegedly obvious falsity of C. The second reading will come naturally to a metaphysician who eschews realism about possible worlds and the first reading of the argument is preferred by such a realist. The semantic observation that the extension of 'is true' diverges from the extension of 'is warranted' does obviously not help with settling this disagreement, as it is not at all clear here what cold possibly count as a warrant. And if we insist that the issue can be decided, then there must be some grounds for deciding it. But can such disagreements be settled on purely metaphysical grounds at all?

Of course, a purely metaphysical disagreement must be settled on the basis of what is true. That is so, because facts decide metaphysical matters and a logical argument in favour or against a contentious proposition is classically valid if it preserves truth from premises to conclusion. Assuming classical logic makes sense here, as it arguably is the preferred logic for a common sense realist and because there is no convincing *prima facie* reason why a sophisticated antirealist must endorse some sort of logical revisionism. So, we know that we either have a valid *modus ponens* or a valid *modus tollens*, but we do not know which one is in fact sound. How should we approach such epistemological issues about logical validity?

Well, an inference is classically valid if it moves us from truths to another truth. And we presumably know that whatever warrant makes the premises acceptable will, by virtue of a classically valid inference, also make the conclusion acceptable. But we now have to flesh out the expression 'by virtue of a classically valid inference' in order to be able to settle issues of priority within a worldview. So, what exactly secures the transfer of warrant from premises to conclusion in any *modus ponens* or *modus tollens* argument put to use in metaphysical debates? Is the transfer of warrant secured by metaphysical facts? Or is it rather secured by what the premises, the conclusion and their constituents mean? Or else, is it about psychological powers, epistemic virtues or epistemological rules, which govern what we believe or know to be good premises? An explanation of how the transfer of warrant in an inference is secured must show whether metaphysical, semantic or epistemological considerations will be in a better position to decide whether the conclusion or the set of premises should count as acceptable. This is so, because it is natural to expect that whatever secures the transfer of warrant within an inference will also be the right source for warranted statements about what may count as inferentially valid. After all, the sort of warrant making a

statement acceptable as a premise should also be suitable to be transferred through a valid inference without loosing any of its acceptability. So, the new big question is how, building on the alternative semantic footing for a conception of truth as epistemically unconstrained, we can decide these issues.

Apart from a new question, we have gained much else from the last section. We have argued that semantic realism (comprising common sense realism and a truth-conditional theory of meaning) must be rejected, because a natural commitment to common sense realism leads us to reject a truth-conditional theory of meaning in order to avoid serious difficulties with accounting for linguistic understanding. This does deal the deathblow to Hattiangadi's conception of correct language use because it requires a truth-conditional theory of meaning plus realism to make plausible that some word-world relation is paradigmatic for objectively correct language use. After all, conflating factual and semantic correctness directly amounts to, as Hattiangadi herself admits, the austere variety of semantic realism she endorses.[173] And there are no further safety nets in what she has proposed in print so far.

The arguments do not rule out Boghossian's proposal, because he can retain a common sense realism and insist that his epistemic rules secure that a word-world relation is paradigmatic for objectively correct language use. But if he wants to retain a common sense realism along the lines presented, his epistemic rules must also account for the transfer of warrant in deductive inferences—if they did not, metaphysical issues could be settled on the basis of semantics only and no paradigmatic word-world relation could add any explanatory surplus concerning objectivity anymore.

In the next section, I shall flesh out the alternative semantic footing of the doctrine that truth is epistemically unconstrained in terms that should be acceptable for Boghossian and which are not in tension with my Wittgensteinian proposal. After that we may ask which of the two competing strategies has better prospects to explain the transfer of warrant in deductive inferences. The better strategy will then also have the best reasons to adjudicate issues of priority within a worldview.

Basic Statements

I have argued that the extensions of the predicates 'is true' and 'is warrantedly assertible' sometimes diverge. This simple observation was introduced as an alternative semantic footing

[173] E.g. Hattiangadi 2007:12-13, where she writes that word-meaning can be given by correctness-conditions, that sentence-meaning can be given by truth-conditions and that ascriptions of meaning are factual (i.e. true in virtue of objective and judgement independent facts).

for the idea that some truths are epistemically unconstrained, because epistemic constraints on truth require it to be warranted in some way or other. We needed that account, because realism is wedded to the intuition that not all truths require warrant (or methods of verification). For those truths, neither perception (in circumstances optimal for knowledge), nor inference from warranted premises, nor testimony of reliable sources will be constitutive. A common sense realist might think that there is a definite number of grains of sand on planet earth; but he might also think that deciding what that number is is completely beyond our ken. It is here where his views clash with antirealism, because antirealists find truths, for which no conceivable method can produce evidence, otiose.

My reasons for adopting common sense realism are twofold. First, it *is* common sense—that is how we usually talk and how we usually think. And patterns of common talk and reasoning (i.e. of common understanding) are not revised easily. Second, adopting common sense realism allows me to argue against semantic realism through the familiar objections raised by Dummett. I have, therefore, no purely metaphysical motivation to argue against antirealism and I do think that what follows below should be acceptable for most antirealists. So, how is the semantic footing introduced in the previous section to be fleshed out?

Some of the truths which do not require further warrant are fathomable, they play a role in rational thought and talk. For these cases, realist and antirealist views need not clash. As an example, take the truth that a red patch cannot also be green. That truth about colour does not require any specific warrant (made available through perception, inference or testimony), but it is still fathomable and plays a role in rational thought and talk. Thinking and talking about that second sort of truths which do not require warrant can be said to be basic, because such thinking or talking does not require an explicit foundation in anything to make sense at all—but it does still play a distinct role in rational thought and talk.

One way of approaching basic thought and talk is through basic concepts. Boghossian has a different way into this and I shall discuss it later on. For the moment, let us stick to basic concepts for the sake of simplicity. The idea is that there are some concepts—the basic ones––a justified application and linguistic expression of which does not require warrant. Truth, then, is a basic concept and the predicate ‘is true’ will also be basic, as it marks the application of the basic concept in every situation in which the extension of ‘is true’ diverges from the extensions of ‘is warrantedly assertible’ or ‘is warranted’. Crispin Wright has, partly in co-operation with Christopher Peacocke, provided the criteria for predicates and relations expressing basic concepts:

> Let us stipulate that a predicate *F*, or a relation *R*, is *basic* just in case it satisfies all the following conditions:
>
> 1 *F*, or *R*, is capable of featuring in recognition statements.
>
> 2 Nobody counts as understanding *F*, or *R*, who lacks the capacity—even when perceiving normally in normal circumstances—competently to appraise recognition statements which contain them.
>
> […]
>
> 3 It is not possible coherently to regard someone both as able to pass all reasonable tests for the ability to recognize demonstrative presentations of *F*s, or *R*-relata, *and* as lacking a full understanding of *F*, or *R*.
>
> […]
>
> 4 *F*, or *R*, has no analysis in terms of other predicates, or relations, meeting requirements 1, 2 and 3.[174]

Condition 4, Wright adds, is meant to convey and give substance to the idea that basic concepts are primitive concepts. Understanding these concepts is *sui generis*, as such an understanding cannot be analysed in terms which do not already employ them. There are two ways in which possession of primitive concepts can be manifested and distinguishing between them is important. Primitive concepts can be employed in basic judgements—the paradigm of basic thought—and in basic statements—the paradigm of basic talk. In a basic judgement, one exercises recognitional capacities which only require employing the primitive concepts appropriate for it. Judging, for example, of a blue square that it is not red too means making a basic judgement, for the concepts 'blue' and 'red' cannot be analysed in terms which do not already employ them.

It now seems that grasping the content of a basic judgement means that one straightaway recognises its truth in appropriate circumstances—if one understands it at all. For non-basic judgements, the contents of which are partially built from combining primitive concepts, we can make sense of the idea that one can grasp a content, judge it to be true and then express it through an assertion or believe it. The notion of a non-basic judgement entails, thus, that a content can be deployed in an assertion or a belief. This obviously drives a wedge between contents and how they figure in thought and talk. We should be wary of a commitment to any sort of autonomous content without having good reasons for it. The advantage of the proposal is clear: a basic judgement that *X* suffices to warrant claims to knowledge that *X*. Such knowledge is, then, also basic and claiming that one possesses such knowledge is not assailable unless there is evidence to the effect that the corresponding basic

[174] Wright 1986a:278-279

judgement has not been made.

I have, however, argued in section 1.3 of part A—where I first raised issues about objectivity—that the appeal to judgements is not necessary and that we should better explain the relevant phenomena by appealing simply to facts of language use. Employing primitive concepts in statements need not involve an antecedent basic judgement. Rather, a basic statement simply employs primitive concepts in language use. Any more specific appeal to antecedent judgements or (possibly autonomous) contents of statements is uncalled for. Talk of basic statements will still, to be sure, mean that employing primitive concepts involves exercising appropriate recognitional capacities, but they will be exercised in actual language use and not in an antecedent judgement. Possessing recognitional capacities then boils down to being able to make basic statements in which primitive concepts are applied. Of course, basic statements associated with logic—like a statement expressing an instance of *modus ponens*—will be naturally explained through the capacity to infer and basic statements associated with sight—like the statements that a red patch cannot be blue or that a round circle has no edges—will be naturally explained through the capacity to see. The concept of a capacity will hence be employed to group basic statements. The bone of contention between Boghossian and me is whether transfer of warrant in inferring involves capacities in accord with epistemic rules (as Boghossian thinks) or with semantic rules (as I think).

There is, however, much that Boghossian and I agree on. First of all, both of us subscribe to common sense realism and both of us are worried about how a good conception of objectivity can be made to work. I approach objectivity via the notion of a basic statement. A basic statement, on my reading, expresses that a recognitional capacity is actually being exercised: the statement presupposes that an internal relation between a fact and what counts as recognising it actually obtains. But the notion of a basic statement might seem to work just as well for Boghossian's approach, provided that basic statements can be regarded as expressing applications of epistemic rules. And how can both approaches have a conception of recognitional capacities as required by Wright's definition of basic concepts? We can both say that a basic statement is always true if the recognitional capacities involved are actually exercised in normal circumstances and vice versa. But for Boghossian, epistemic rules intervene. A statement is basic if and only if it expresses the exercise of a recognitional capacity in accord with an epistemic rule. As far as epistemological issues are at stake, the speaker can be no more correct than this. And because we focus on epistemological issues here, factual issues need not be very important for justification. Boghossian and I assume that it is possible to be justified in believing that a factual statement is true without it actually

being true. We may be justified to claim that tomorrow's weather will be splendid—because we have employed state of the art meteorology to ascertain that—and even if it turns out bad, we will have been justified nevertheless. The important question is, to repeat, whether the exercise of recognitional capacities—especially the capacity to recognise whether an inference is valid or not—should be construed as involving accord with epistemic rules (as Boghossian holds) or with semantic rules (as I think).

So what does all of this mean for realism-antirealism disputes? After all, we arrived at the notion of a basic statement, because we wanted to safeguard a common sense realism about most concrete objects we encounter in everyday life. And if we want to hold that some things are real and others are not, we should allow realism-antirealism disputes about things like black-holes, neutrinos, countries, money, jokes or artistic values.

Note that we must concede that a realism-antirealism dispute about basic statements is not possible. It will make no difference whether one says that a basic statement is true or (possibly) warrantedely assertible—the predicates 'is true' and 'is (possibly) warrantedly assertible' will be coextensive when applied to them. Realism-antirealism disputes, then, will be disputes about whether the truth-predicate and the (possibly-)warrantedly-assertible-predicate are coextensive for non-basic statements. The realist wins if the two predicates are not coextensive for a non-basic statement in metaphysics; otherwise, the antirealist wins.

The proposal has it that we can now make sense of the idea that we can be antirealists concerning (non-basic) statements about, for example, what is comical while, at the same time, be realists concerning (non-basic) statements about, for example, mid-size dry goods and still retain truth-conditions for all those statements. We must, however, refrain from claiming that those truth-conditions can be systematised through a Dummettian theory of meaning, because we have put much effort into showing that we can either have a truth-conditional theory of meaning or common sense realism and that we should opt for common sense realism. We now have a philosophical footing for a piecemeal approach to a wide variety of realism-antirealism disputes and nobody has to adopt a crude all-or-nothing-at-all attitude anymore.

The price for this, as we have seen, is that we forge a close connection between basic statements and recognitional capacities: a basic statement is always true if the recognitional capacities involved are actually exercised in normal circumstances and vice versa. This idea is also the key to understanding the "Wittgensteinian factualism" which drives my take on objectivity. For I hold that a basic statement expresses the internal relation between a fact and what counts as recognising what actually obtains. Boghossian, on the other hand, defines such

relations through specific epistemic principles.

This completes the more detailed account of the common ground between Boghossian and myself. We have seen that the notion of a basic statement still allows us to make sense of the idea that some truths are epistemically unconstrained. We have also seen that substantial realism-antirealism disputes remain possible and important for non-basic statements within metaphysics. It should also be clear that my Wittgensteinian proposal and Boghossian's proposal can both make use of basic statements in a similar way. All of this clears the ground for the assessment that will decide between my Wittgensteinian and Boghossian's proposal. The big question is: who has a better account of transfer of warrant in deductive inferences?

3) Basic Statements and Epistemic Rules

Analyticity Returns

Boghossian has an interesting and insightful account of basic statements. For him, the explanation of such cases provides the necessary footing for the claim that objectively correct language use is settled by epistemic rules and that linguistic normativity is, if anything, epistemic normativity in disguise. What he is after, then, is an account which buttresses the assimilation of factual and semantic correctness by adducing a specific conception of epistemological correctness.

Formal languages provide us with the clearest sort of cases along the lines that interest Boghossian. This has several reasons. In formal languages, truth and falsity are objectively settled independently of the full-blown truth-conditional theories of meaning that Dummett had envisaged for natural languages. And it also looks as if some tautologous statements we encounter in formal languages do have the status of basic statements in natural language use.[175] Furthermore, formally valid inferences can be thought to provide at least a model for objectively correct extrapolations in language use. It may turn out that correct extrapolations of new language uses can sometimes be reduced to validly inferring. In addition to that, we have seen that a clear account of the transfer of warrant from premises to conclusion in formally valid inferences can be expected to conclusively settle open issues surrounding priorities in a worldview.

Focusing on classical statement logic, we can introduce atomic statements, negation as a unary operator on them and some binary connective (viz. conjunction, disjunction or

[175] Cf. Dummett 1991

conditional) through truth-tables.[176] This provides us with the obvious tautologies. They are basic statements, the truth of which is defining of classical statement logic:

1. p v ~p
2. p → p
3. p → (q → p)
4. ~ (p & ~p)

The truth-tables will also provide us with statements the necessary falsity of which is defining of classical statement logic, among those contradictions we find:

1. ~ (p v ~p)
2. p & ~p
3. ~ ((p v q) ↔ (q v p))
4. ~ ((p & (q v r)) ↔ ((p & q) v (p & r)))

These findings cannot be straightaway deployed for Boghossian's purposes. First of all, statements like, for example, 1 and 4 amongst the contradictions are true for some varieties of non-classical logic. Intuitionistic logic accepts ~ (p v ~p) as a provable theorem and quantum logic accepts ~ ((p & (q v r)) ↔ ((p & q) v (p & r))). Modelling objectively correct extrapolations in language use on formal validity hence requires criteria for distinguishing and evaluating different formal languages. A second, but related, question concerns the precise relation of formal to natural languages. It is not clear exactly to which extend formal validity and objectively correct extrapolations in language use are the same—or whether they are related at all. It seems, however, *prima facie* plausible that logic determines some extrapolations of correct language use (based on a finite set of language uses which already count as correct) in new situations.

There are, however, also statements in natural language which are sometimes said to count as cases of the required sort. Amongst English statements which are supposedly always true we find:

1. Vixens are female foxes.
2. Bachelors are unmarried men.
3. Nothing can be at the same time green and red all over.
4. Whatever has shape is extended.
5. If x is longer than y, then y is not longer than x.

Such statements have traditionally been labelled with the term 'analytic truth' and are usually considered to give way to a conception of apriority, because such truths are (also

[176] I generally follow Partee et al. 1990.

traditionally) supposed to be known prior to and independent of sensory experience.[177] It is most interesting for Boghossian that a belief can be justified independently of outer, sensory experience, i.e. independently of considerations naturally bound up with common sense realism. He distinguishes a minimalist and a strong reading of the idea:

> (Minimalist Apriority)
> To say that the warrant for a given belief is a priori is just to say that it is justified, with a strength sufficient for knowledge, without appeal to empirical evidence. Empirical evidence may, however, topple the justification.
> (Strong Apriority)
> Minimalist apriority holds and the justification in question cannot be toppled by any further empirical evidence. [178]

Note that, in the present context, only the minimalist conception is needed. It already provides us with a notion of objectivity which we can, if it proves operational, be forged into accounts of correct language use in order to come up with a suitable conception of what objectively correct language use comes down to. From that point of view, the strong conception of apriority would do no additional work to ground objectivity for everyday language use.

The idea of empirical defeasibility embedded in the minimalist conception is on a par with my Wittgensteinian proposal. The *explanandum* for both is how objectively correct language use is possible and why basic statements may count as warranted by default. A belief which is warranted by default is *a priori* warranted in the minimalist sense. Basic statements, then, can be construed as expressing such beliefs. We may now ask whether Boghossian's appeal to epistemic rules can provide a better explanation for the *explanandum* than my Wittgensteinian proposal.

Analytic truths are, if we want to paraphrase a traditional characterisation of *a priori* truths, true in virtue of meaning. There are two ways of understanding this phrase. On a metaphysical reading, an analytic truth 'owes its truth value completely to its meaning, and not at all to "the facts"'. This is a very strong claim and sounds queer, because commitment to common sense realism is regarded as mandatory in the present context. Why should a realist claim that some true statement does not owe its truth-value to (the) facts? After all, an objectively true statement expresses a real fact of the matter. Intuitively, the claim that truth flows from meaning alone is too strong, because an analytically true statement may have constituents the application-conditions of which (or, if we speak about embedded statements, the truth-conditions of which) does depend on empirically decidable facts. In that case, the

[177] Cf. Ayer 1936: ch. 4
[178] Cf. Boghossian 1996:196-7

particular arrangement of the constituents constitutes analyticity and there remains an indirect dependency on facts, because facts determine what the constituents mean. If we can construe analytically true statements as also expressing empirical concepts, then there does remain some sort of dependency on what facts there are. For employing any empirical concept presupposes that certain empirical facts and regularities obtain and if these facts and regularities were to change, some analytic truths might also change because the constituents (which express the empirical concepts affected by the change) indirectly depend on the facts and regularities that changed.

So, the metaphysical conception of analyticity commits itself to a view about how some truths are constituted which does not respect a realist take on constitutive questions. It is thus hard to see how a common sense realist can believe that such analytic truths exist. The reason why analyticity has a bad reputation in many realist circles is because it is widely held that the metaphysical reading is the only one available and because its upshot concerning the import of empirically decidable facts is hardly feasible.[179] Boghossian shares these worries and repudiates the metaphysical reading. He suggests an alternative notion of analyticity:

> The central impetus behind the *analytic* explanation of the a priori is a desire to explain the possibility of a priori knowledge without having to postulate […] a special faculty, one that has never been described in satisfactory terms. The question is: How could a factual statement **S** be known a priori by **T**, without the help of a special evidence-gathering faculty?
>
> Here, it would seem, is one way: *If mere grasp of **S's meaning T** sufficed for **T**'s being justified in holding **S** true.* If **S** were analytic in this sense, then, clearly, its apriority would be explainable without appeal to a special faculty of intuition: mere grasp of its meaning by **T** would suffice for explaining **T**'s justification for holding **S** true. On this understanding, then, 'analyticity' is an overtly *epistemological* notion: a statement is 'true by virtue of its meaning' provided that grasp of its meaning alone suffices for justified belief in its truth.[180]

We must add here, that it is possible to be justified in believing that a factual statement is true without it actually being true. We may be justified to claim that tomorrow's weather will be splendid—because we have employed state of the art meteorology to ascertain that—and even if it turns out bad, we will have been justified nevertheless. Boghossian gives a different example. He writes that the pre-Aristotelian Greeks were justified in believing that the earth

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[179] Op. cit. pp. 198-200; Boghossian identifies Quine 1951 as the source of the bad reputation that the concept of analyticity has. But he goes on to argue that Quine's worries only affect the metaphysical construal of analyticity and not the alternative, epistemological, construal.
[180] Ibid.

was flat, because the evidence they had available made that judgement rational. But with the evidence we have now, we are justified in believing that the earth is spherical.[181] It can be gleaned from this that Boghossian distinguishes factually correct language use from epistemologically correct language use and that his conception of analyticity is meant to account for cases of objectively correct language use, where epistemological correctness is at stake.

Boghossian's next observation is that the epistemological conception of analytic truths is completely innocuous when it comes to formal languages. It is indeed the case that understanding any tautology justifies belief in its truth and understanding any contradiction justifies belief in its falsity. Such justifications do not entail anything specific about how such truths are constituted. If we equate analytic truths in formal languages with tautologies, we have obtained a first example of apriority—the apriority of logic. But what does it amount to? More specifically, what would be an appropriate way of construing what grasping the meaning of logical constants amounts to? Boghossian introduces the notion of implicit definition, according to which grasping the meaning of a logical constant means knowing its import on the validity of inferences from and to statements containing it.[182] That establishes that there is a straightforward connection between the epistemological notion of analyticity and implicit definitions and that, in turn, directly gives way to what *a priori* knowledge of formal validity amounts to. The *a priori* knowledge of formal validity is, Boghossian proposes, manifest in the correctness of the following reasoning:

1. If logical constant **C** is to mean what it does, then argument-form **A** has to be valid, for **C** means whatever logical object in fact makes **A** valid.
2. **C** means what it does.

Therefore,

3. **A** is valid.[183]

Now, the correctness of that reasoning does not yet explain knowledge, it only exemplifies it and shows how simple and intuitively appealing reasoning in accord with it becomes. But Boghossian goes on to claim that explaining the relation between his epistemic conception of analyticity and implicitly defined logical constants is now straightforward:

> Let us consider a particular inference form, **A**, in a particular thinker's (**T**) repertoire; and let's suppose that that inference form is constitutive of the meaning of one of its ingredient constants **C**. How, exactly, might these facts help explain the epistemic analyticity of **A** for **T**? To say that **A** is epistemically analytic for **T** is to say that **T**'s

[181] Cf. Boghossian 2006:15
[182] Op. cit. p. 210
[183] Ibid.

knowledge of **A**'s meaning alone suffices for **T**'s justification for **A**, so that empirical support is not required.[184]

Surprisingly enough, these considerations move Boghossian closer to my Wittgensteinian proposal than initially expected. For me, the implicit definition of a logical constant C expresses an internal relation between it and how it figures in formally valid inferring. But Boghossian goes a bit further than this. He adds that logical constants express logical objects and claims that the objects are constituted by the validity of the relevant statements and inferences. It thus seems that he takes there to be internal relations between objects and the relevant inferences and treats logical constants as expressions denoting those objects. The difference between Boghossian's view and mine comes down to the idea that, for Boghossian, the correct use of logical constants can somehow be separated from the internal relations between the logical objects they express and the inferences in which they figure. In other words, Boghossian seems to assume that internal relations are not to be found in how logical constants are used but in the logical objects that they express and the role they play.[185] It is here where I shall eventually locate the essential disagreement between his and my proposal.

So far, Boghossian has only argued for objective grounds in logic. It remains to be examined how he spells this idea out in order to come up with a more general notion of objective grounds for explaining and rationalising language use. For only that next step provides him with a notion of objectively correct language use in accord with the starting point of the present part of the thesis: the idea that saying something is not merely emitting a noise, because it can be explained on objective grounds.

Objections and Extensions

From my Wittgensteinian point of view, the central worry about Boghossian's approach is this: if analyticity is to be explained through implicit definitions, the correct use of expressions cannot, pace Boghossian, be separated from the internal relations they express. In order to see how the worry can be turned into a full-fledged objection, consider a general template for implicit definitions which may be supposed to work for all analytic sentences.[186]

Let S(f) be analytic then we get

1. S(f) means that P (By knowledge of meaning)

[184] Op. cit. p. 222

[185] I guess that matters are, in a metaphysical sense, much deeper for him than they are for me.

[186] This template can be adapted to suit empistemological analyticity only. But Boghossian does not adapt it in that way and I shall remain faithful to how he presents things here––especially since the template serves illustrative purposes only and will be rejected anyway.

2.	If S(f) means that P, S(f) is true	(By the definition of analyticity)
3.	Therefore, S(f) is true	
4.	If S(f) means that P, then S(f) is true iff P	(By knowledge of the link between meaning and truth)
5.	S(f) is true iff P	from 1 and 4
6.	Therefore, P[187]	from 3 and 5

We may plug in a candidate analytic sentence to exemplify the template:

1. 'Whatever has shape is extended' means that whatever has shape is extended
2. If 'Whatever has shape is extended' means that whatever has shape is extended, 'Whatever has shape is extended' is true
3. Therefore, 'Whatever has shape is extended' is true
4. If 'Whatever has shape is extended' means that whatever has shape is extended, then 'Whatever has shape is extended' is true iff whatever has shape is extended
5. 'Whatever has shape is extended' is true iff whatever has shape is extended
6. Therefore, whatever has shape is extended

Now, it could be argued that a warranted belief in 1 presupposes a warranted belief that P. In other words, the belief that S(f) means P cannot count as warranted if no warranted belief in P is already available.[188] That is obviously not always the case. The belief that "Gras ist grün" means that grass is green does not at all presuppose that the belief that grass is green be warranted. But is the objection any good in the special case we consider here?

In the case of analytic statements the objection might seem more interesting. The objection runs as follows: the warranted belief that 'Whatever has shape is extended' means that whatever has shape is extended does presuppose another warranted belief, namely the belief that whatever has shape is extended. If that presupposition is licit—as it might seem required by statement 1 of the argument above—then the concluding statement 6 follows trivially, because it had been presupposed by statement 1.

Boghossian has tried to argue that statement 1 does not presuppose that believing P is warranted. I think he is right about some analytic statements in natural languages. So, somebody who knows German understands that 'Was Form hat, ist ausgedehnt' means 'Whatever has shape is extended'. Now, does the warranted belief that 'Was Form hat, ist ausgedehnt' means that whatever has shape is extended presuppose any beliefs about shape and physical extension? I do not need to have the warranted belief that whatever has shape is extended—which is a belief about shape and physical extension—in order to have the

[187] The template is from Boghossian 2003b:230, but I have adapted it a bit to suit the present context.
[188] The idea comes from Glüer 2003:57 and Laurence Bojour 1988:50-1.

warranted belief that 'Was Form hat, ist ausgedehnt' means that whatever has shape is extended, because the second belief is not about shape and physical extension at all. The second belief is about what a sentence in German means in English. Boghossian is therefore right about such analytic statements in natural language: belief that S(f) means P can often count as warranted if no warranted belief in P is already available.

This does not mean, however, that Boghossian has a watertight conception of implicit definition. When it comes to explaining the meaning of logical constants through implicit definitions, his intuitions mislead him. Invoking intuitions about expressions of logical conjunction like 'and', he asks whether we really

> wish to say that if the meaning of 'and' is fixed by a thinker's being disposed to use it according to its standard introduction and elimination rules that he cannot be said to know what 'and' means without first knowing that 'A and B' implies A?[189]

If we construe the notion of a disposition in a way that renders it immune to Kripke's attacks––i.e. if we construe dispositions as internally related to what counts as manifesting such a disposition—then I should, pace Boghossian's intuitions, answer 'yes'. After all, the implicit definition of a logical constant like 'and' expresses an internal relation between that constant and how it affects the validity of certain inferences. And for that reason, the warranted belief that '(A and B) implies A' means that A and B together imply A must presuppose the warranted belief that A and B together imply A, simply because '(A and B) implies A' is the elimination rule which is (partly) defining of what logical conjunction means. We therefore do have a counterexample to Boghossian's template.

Boghossian himself seems inclined to deny such a line of reasoning. For him, the meaning of 'and' is independent in some sense. But if that is so, then a disposition to use 'and' in accord with its standard introduction and elimination rules construes the meaning of 'and' as an external relation. Or, if we do not adopt Boghossian's talk of disposition here, the rules to use 'and' require something over and above the rules of inference. For Boghossian, it appears, there are three elements to this: the meaning of 'and' (conjunction as a logical object), the disposition to use it in accord with the rules and the manifestation of such dispositions (the symbol 'and' and its use). Therefore, he assumes a pernicious construal of dispositions here—one which neglects the internal relation between the disposition to use an expression and what counts as using it—and that construal, as we have discussed at great length in part A, cannot withstand Kripke's attacks.[190]

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[189] Boghossian 2003b:232

[190] Boghossian himself fully endorses Kripke's attacks on dispositions in his 2008:chs. 1, 2 and 3.

Boghossian's template does not do the work it is supposed to do.[191] He does, however, consider an alternative account of implicit definitions, which looks more promising. Implicit definitions of logical constants, Boghossian proposes, can be understood to be rule-circular, i.e. to be self-constituting and self-justifying.[192] Logical laws like *modus ponens* can—according to that proposal—be conceived of as self-constituting and self-justifying. And because *modus ponens* is, for him, an epistemic rule guiding good belief formation, epistemic rules will turn out to be self-justifying as well.

With this strategy, Boghossian comes very close to a Wittgensteinian position. Throughout all of his career, Wittgenstein held that logical laws do not require justification, because the laws of logic are self-sufficient. He abided by the conviction ever since he had announced it in the *Tractatus*, where he wrote (TLP 5.473) that logic must take care of itself and that, in a certain sense, we cannot make mistakes in logic. This approach reinstates the Aristotelian conviction that the justification of logical laws must always be circular to some degree, because logical laws are presupposed in all reasoning.[193] I surmise that Boghossian wants to hold in analogy to this that his epistemic rules are presupposed in all reasoning and that this is precisely why he announces his approach as a neo-rationalist programme.[194]

The Problem: Transmitting Justification in Deductive Reasoning[195]

It will be useful to give a full account of how the present issues about justification led Boghossian to endorse rule-circularity. The fundamental question that got us involved in issues surrounding basic statements and analyticity was initially this: how shall we construe the transfer of warrant through a logical law like *modus ponens*? Assume that I want to go on a hike in the Swiss Alps. I am planning a suitable route and consider the weather; the reports for the area are rather unreliable and I reason:

1) If alpine choughs occur in large groups, the weather in the area will change in the next 2 days.
2) Alpine choughs occur in large groups.
3) The weather in the area will change in the next 2 days.

And off I am to find a route which suits this conclusion. Now, given that I am justified in believing the premises and that my justification for believing the conclusion beforehand does

[191] Boghossian himself eventually rejects the template for independent reasons; see his 2003b:232-233.
[192] Boghossian 2003c
[193] See the entry on logical inference in Glock 1996.
[194] Boghossian 2008:5
[195] An earlier version of the sections below has been published as Demont 2008.

not ground my justification for believing the premises, under what conditions does my deductive reasoning transmit warrant from the premises to the conclusion?

Boghossian himself formulates the question differently: in order for the inference to transfer justification from its premises to its conclusion, the premises must bear an appropriate relation to the conclusion they ground—what, then, is that relation?[196] My wording asks for the right conditions, Boghossian looks for a relation. While an appropriate relation requires at least one necessary condition, it might turn out that *no* necessary condition describes such a relation, that there is only a mixed bag of sufficient conditions. Boghossian does not account for this possibility and this is ultimately why he could not foresee the alternative position proposed below. But let us stay with what Boghossian and I agree on for the moment.

A simple account of how warrant is transferred from premises to conclusion—and the first one a common sense realist should think of—runs like this: my inference moved me from two truths (the conditional about the behaviour of alpine choughs and a proposition about the actual occurrence of that kind of bird) to another truth, the proposition that the weather will change in the next 2 days. The implicated pattern of inference preserves truth and transfers warrant by virtue of its form.

The question, which a proponent of this first proposal must answer, is: how can an implicated pattern of inference move a thinker from truths to truth i.e. how exactly is warrant transferred? Merely pointing out that there is such a fact is not answering questions either about the necessary and sufficient conditions of the transfer of warrant from premises to conclusion or about the appropriate relation which the premises need to have to the conclusion to ground it. Solving these problems means saying how a thinker is moved from truths to truth—merely pointing out that a thinker is moved in that way cannot answer the question to be pursued here.

Boghossian has the same worry and argues that a large number of inferences, which we are in no intuitive way justified in performing, satisfy the stipulated conditions. Let us consider Boghossian's counterexample. We know that Andrew Wiles, building on more than three centuries of continuous research, has proved the truth of the following conditional:

> If x, y, z, and n are whole numbers and n is greater than 2, then $x^n + y^n$ is not equal to any z^n.

So, together with any true claim of the form

> x, y, z, and n are whole numbers and n is greater than 2

I can infer that an instance of '$x^n + y^n$ is not equal to any z^n' (for an n greater than 2) is true.

[196] Boghossian 2003c:226

Suppose now that the only grounds I have to claim that I have inferred correctly are as follows:

a) I am justified in believing the premises
b) my justification for believing the premises is independent of my justification for believing the conclusion
c) the implicated pattern of inference is valid—necessarily such as to move me from truths to truth[197]

If these are indeed the only grounds to claim that I have inferred correctly, I do still have no good grounds on which to explain how warrant has been transferred from premises to conclusion.

I might perhaps think that I am justified to take the conditional to be true, because proofs of this import are checked thoroughly and I may assume that all the professional mathematicians who have worked on this are (at least when taken together) a reliable source of mathematical truths. And the truth of the second premise is trivial. Furthermore, the justification I have for the premises—provided by reliable testimony and numeracy—is independent of the justification I have for the conclusion, because the justification of the conclusion is solely based on the validity of *modus ponens*. These conditions tell me that I have inferred correctly, but not how warrant has been transferred. I might add that *modus ponens* reliably transfers warrant from premises to conclusion, but more cannot be gleaned from the simple idea that *modus ponens* is truth-preserving. Whether I can rely on inferences in accord with the proof for Fermat's last theorem is not something I am able to testify. And precisely because of this I am not epistemically entitled to claim that warrant has been transferred from premises to conclusion (even if my claim is factually correct).

It is perfectly standard to take the formal validity of *modus ponens* (or similar laws) to be reliable—this is true for all simple cases and a reliabilist might argue that Boghossian's counterexample is just not simple in the relevant sense. What, then, counts as simple in the relevant sense? Just that the formal validity is easy to believe in the case at hand. But then, 'easy to believe' is the salient criterion and 'is reliable' is parasitic upon it in the explanations needed here. Now, will this revised proposal explain transfer of warrant? Consider an counterexample of Laurence Bonjour:

> Norman, under certain conditions which usually obtain, is a completely reliable clairvoyant with respect to certain kinds of subject matter. He possesses no evidence or reasons of any kind for or against the general possibility of such a cognitive power or for or against the thesis that he possesses it. One day Norman comes to believe that the

[197] Ibid., where Boghossian calls this proposal 'Simple Inferential Externalism'.

> President is in New York City, though he has no evidence either for or against this belief. In fact the belief is true and results from his clairvoyant power under circumstances in which it is completely reliable.[198]

Again, we must separate beliefs which are factually correct from beliefs which are epistemically correct, because the factual correctness of Norman's beliefs does not necessarily imply that he is aware of their factual correctness. Norman has a true belief, but is not justified to believe it, even though the belief results from a reliable cognitive power. This, again, shows that reliable mechanisms (such as the formal validity of *modus ponens* or Norman's clairvoyance) need not justify: holding a belief can be epistemically irresponsible, even if it was factually correct.

This more general counterexample to reliabilism suggests that epistemically responsible reasoning requires a thinker who has some reflectively accessible warrant for his beliefs to be justified. Boghossian observes:

> It looks, in other words, as though the counterexamples to Reliabilism motivate an *Access Internalism* about justification: *S* is justified in having the belief that *p* only if *S* is in a position to know, by reflection alone, that he has a warrant for the belief that *p*. If *S* is to have genuine justification, it must be a reflectively *transparent* justification.[199]

This motivates an internalist account of how warrant is transferred, because reliable mechanisms—even though they may furnish us with factually correct beliefs—do not necessarily furnish us with epistemically correct beliefs. We must, it now seems, have an account which admits a reflectively transparent justification for our inferences to be good. Assuming that reflectively transparent justifications are justifications apprehended by reflection alone, internalists take a deductive inference to be warrant transferring only if the follow three conditions are fulfilled:

a) believing the premises is justified
b) the justification for believing the premises is independent of the justification for believing the conclusion
c) the person drawing the inference knows by reflection alone that the premises license believing the conclusion[200]

Let us go back to the first example with me trying to consider weather when planning a hike. The new internalist conditions explain the transfer of warrant by stating that through reflection on the inference alone, I can come up with a good reason for believing that the weather will change. All depends now on how reflection alone secures a transfer of warrant

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[198] Bonjour 1985:41, as cited in Boghossian 2003c:228
[199] Boghossian 2003c:228
[200] Op. cit. p. 229

from premises to conclusion.

Again, there are problems. In the present solution, reflection *alone* is said to provide a good reason to believe (given the premises) that the weather will change. Reflection must, in this case, be taken to provide good reasons for believing that the true premises furnish me with a justification for believing the conclusion. But then, it is not reflection *alone* that justifies; it must also be about something true. Some truths about the external world upon which a thinker reflects must be presupposed for the reflection to reliably generate justification for conclusions about whether to take a hike. So it appears that reflection must have an experiential basis in order to transfer warrant from premises to conclusion and, therefore, to justifying anything. In other words: sometimes, the transfer of warrant through an inference depends on there being truths on both ends—the premises must be true and the conclusion must be true. If justification through reflection is not good enough to ground a true belief, the internalist alternative will have no point.

Boghossian approaches knowledge of formal validity according to the internalist proposal in a similar way. He asks: 'How might S be in a position to know by reflection alone that p and p→q imply q?'[201] There seem to be, at least theoretically, two options for internalists: inferentialism—claiming that reflection is confined to drawing inference—and non-inferentialism—claiming that reflection does neither involve drawing inference nor that it does involve experiences of the external world.

The inferentialist commits a *petitio principii*, as he explains knowing the validity of *modus ponens* by presupposing valid instances of *modus ponens* as components of the explanation of the reasoning in question. When discussing the epistemology of logical laws, assuming that knowledge can always be explained through emphasising the central role of good inferences cannot be else than viciously circular.

The non-inferentialist, on the other hand, can point out that some sort of observation brings along the needed justification or that nothing at all justifies it. The second non-inferentialist option is a form of primitivism: one is simply justified in believing that *modus ponens* transfers warrant. This need not be a feature of all beliefs, but of beliefs about transfer of warrant in deductive reasoning. So, the non-inferentialist can just insist that some basic beliefs play a decisive role in logic—if you have them, you have them reasonably. Boghossian worries that it might be too hard to find conditions which allow us to draw a difference between basic and non-basic beliefs in logic. But that is unwarranted. Based on what was said earlier above, we can simply hold that basic beliefs about logic are those which can be

[201] Ibid.

expressed through basic statements in logic, whereas the non-basic beliefs can only be expressed trough the corresponding non-basic statements. So appealing to basic beliefs seems a good option for the internalist. But what about other options?

Is there a way to argue that some special sort of observation provides the needed justification? Let us examine that non-inferentialist strategy more closely: what kind of observation could justify the validity of my inferences? Observing external objects (and states of affairs) and reflecting on such observations cannot be a good answer for the internalist, as he then has to admit that reliable mechanisms furnishing us with factually correct beliefs are more fundamental. The thinker concludes, in that case, by merely reflecting on the fact that he has been moved from truths to truth. (Note that it makes no difference here whether this reflection happens while the thinker is moved from truths to truth or after.) The internalist then becomes a reliabilist in disguise and, *pari passu*, subject to the corresponding worries. So, is there another notion of observation that the internalist could employ?

Non-inferential internalists who are wary of basic beliefs require an account of how one simply sees that from true *modus ponens* premises a true conclusion follows straightaway—they must assume some rational insight into the validity of *modus ponens*. Suppose there was a useful concept of rational insight.[202] How would rational insight explain that a thinker inferring through *modus ponens* is actually justified in believing the validity of the inference? As the internalist is after the validity of the form of *modus ponens* and not after the validity of specific instances, rational insight should justify all uses of *modus ponens* at once. But then, the thinker has to make a step from the general validity of *modus ponens* to the validity of any particular instance of *modus ponens* whenever rational insight justifies an instance of the inference. He reasons:

1) If an inference is an instance of *modus ponens*, it is valid.

2) This inference is an instance of *modus ponens*.

3) This inference is valid.

This means that for rational insight to justify the use of *modus ponens*, transfer of warrant through *modus ponens* must be presupposed to allow for making the step from the general validity of *modus ponens* (vindicated by rational insight) to its specific instances.[203]

A similar problem appears for a rational insight into the validity of a specific instance of *modus ponens*: the thinker needs *modus ponens* to infer that he is generally justified by his singular insight to take the specific instance of *modus ponens* to be valid—that his use of the specific *modus ponens* is valid not only once, but every time he makes it. Otherwise, rational

[202] Cf. Boghossian 2003c: 230-232

[203] Op. cit. p. 233

insight would never allow him to be sure that his inference is valid—and transfers warrant—until he makes it and the internalist account would not be a good and general explanation, because inferring could always turn out differently in the future.

After a promising start, the proponent of rational insight commits a *petitio principii*—just like the inferentialist did: he must presuppose the validity of *modus ponens* in general to explain the validity of an instance of *modus ponens*. All the non-inferentialist internalist can do now is pointing out that rational insight into the validity of *modus ponens* justifies the thinker's inferring as his seeing a healthy tree's leaves in late spring under optimal conditions justifies him straightaway in believing that these leaves are green.[204] But then again, merely having this specific belief is also being justified in having this belief. So, we are back at discussing basic beliefs, where the status of a belief being reasonable by default can be seen straightaway (at an instance) but is supposed to be warranting in general. It remains unclear how an instantanious insight into whether a contingent fact obtains at that instant justifies general beliefs concerning that very fact. It is this unclarity which is the primary obstacle for internalism.

I have shown that reliabilism and internalism, simple and common though they might be, cannot explain the transfer of warrant in standard forms of inference like *modus ponens* in a way satisfying for Boghossian's or my own purposes. This leads us to Boghossian's own account of how the transfer must be explained. After that, I will show that there are explanatory needs which Boghossian's solution cannot satisfy and how my Wittgensteinian approach to basic beliefs might solve the problems in a more straightforward way.

Blind Reasoning: Inferences Built into Concepts

According to Boghossian, an important lesson to be learned from the considerations made so far is this: certain forms of deliberation must be entitling without needing a thinker who knows this or is able to arrive at that knowledge by reliable means.[205] Certain inferences must be blind but justifying, this means that certain logical rules just underpin themselves, their explanation is rule-circular. This is an explicit commitment to a rule-based normativity of rules which does not lead to an infinite regress because some pivotal rules, such as *modus ponens*, are self-justifying. For them, the regress is supposed to stop when they are applied to themselves.

Prima facie, there seems to be a strong tension between this conjecture and the

[204] Cf. op. cit. p. 235
[205] Op. cit. p. 237

requirement for a thinker to be epistemically blameless: when it comes to more complicated inferential patterns, the thinker must also be able to claim on the very same grounds that he is justified; this means that the thinker must at least believe that his inferences are acceptable, that he is entitled to infer as he does. But a thinker can also be blameworthy or blameless in the eyes of other people and he may be blameworthy in their eyes while remaining convinced that he is not—his problem, then, is that he might have to string together a large number of applications of *modus ponens* in order to counter the worries of the others. The number of applications of *modus ponens* that he has to string together may, however, be too large to convince others that he is not blameworthy, because his proof is simply not surveyable. This ties in with the more general observation that being epistemically blameless or blameworthy may have something to do with other people's reactions to one's reasoning.

How precisely should we understand this dependence on other people's reactions? It seems too quick to conjecture yet that being epistemically blameworthy or blameless has something to do with correct language use. So, whence the dependence?

I think that it is innocuous to assume that it is reasonable by default to apply a *modus ponens* to warranted premises and to then expect a transfer of warrant to the conclusion. How can such a default entitlement be toppled? Heavily imbibed and cognitively impaired persons cannot, of course, reasonably apply a *modus ponens* to warranted premises—if the case is severe enough, valid inferences will transfer nothing. This is so, because a statement expressing the logical form of *modus ponens* is a basic statement and with temporally impaired language users we do not—if the case is severe enough—distinguish between a proper saying and an extended grunt.

My take on what counts as reasonable by default does of course rule out that validly inferring can be justified by taking *modi ponendi* to be instances of a general pattern. This contrasts with the internalist idea that reflection alone secures a transfer of warrant by somehow accessing a general pattern behind the curtains. It is here where internalism goes wrong, because the status of being a warranted application of a *modus ponens* can be toppled and it can not only be toppled if there are good reasons to suppose that the premises are false, but also when impaired language users try to speak or infer. Normally, empirical evidence furnishes us with evidence that the premises of an inference are false or that there is an impairment which is severe enough. But there are also cases in which the inference is just not surveyable: if we consider a large number of applications of *modus ponens* stringed together, people may very well doubt that something went wrong when the inferences are drawn. Such doubts are sufficiently well motivated when these other people find that the string of

inferences is not surveyable. In such circumstances, rules of inference like *modus ponens* are not absolutely self-justifying and then it makes a big difference whether other people find one's inferring surveyable—and I count as epistemically blameless only if they find my inferring surveyable. It hence appears that other people's reactions do matter for whether warrant is transferred from premises to conclusion, especially if such a transfer requires a vast number of particular inferences. And from this we glean that my way of bringing in basic beliefs does not suffer from the worries that applied to an internalist story about justification through reflection.

Every thinker, then, may believe that he is by default entitled to infer as he does as long as there is no evidence that (at least) one of his premises is not true, that he is subject to a cognitive shortcoming or that his inferences are too complicated. An entitlement to infer which does not satisfy these conditions is worthless, because it cannot support any claim that I am justified if I do not know that I am justified. And why should we suppose that a worthless justification is not simply nonsense? After all, a justification that does not justify anything to anybody is simply inconceivable.

Discussing the transfer of warrant from premises to conclusion only makes sense if the claim for being justified by virtue of the form of a thinker's inferences seems to be counter-intuitive, i.e. only when somebody sincerely finds it conceivable to question such transfers of warrant. Boghossian does not see these points about claiming that one is justified and obviously neglects that these points follow from a closer examination of the concepts of blameworthiness and blamelessness that he himself had brought in. That is unfortunate, as these findings about blameworthiness and blamelessness would allow him do dodge a knock-down objection to which we turn now.

Boghossian's rule-circularity builds on a tight connection between meaning and entitlement. There is something like an entitlement *a priori*; one is, in cases of rule-circularity, justified in inferring such-and-such just through knowing the meaning of the words involved, through possessing the concepts they express:

> Any inferential transitions built into the possession conditions for a [logical] concept are *eo ipso* entitling.[206]

This is a more elaborated inferentialist strategy than the one encountered before and it is a natural elaboration of Boghossian's views on analytic truths and implicit definitions. It may, however, be asked whether accounting for the transfer of warrant from premises to conclusion

[206] Boghossian 2003c:241; note that Boghossian distinguishes between defective and non-defective concepts. Accounting for logical concepts, however, is possible without the distinction and runs along the lines proposed here (cf. Boghossina 2008:286-7). I shall therefore not elaborate on the distinction.

can be answered at all within the idiom of such an inferentialist conception of logical thought and meaning. I think the correct answer is 'no'.

Here is how the objection runs. For Boghossian, understanding a word like 'and' means having the concept of conjunction. Having a concept also means grasping how it relates to other concepts (like the concepts of negation, disjunction and the conditional) by virtue of grasping how the concept figures in inferential patterns. Timothy Williamson calls this inferentialist proposition (Have) and summarises its shortcoming in the following way:

> Unfortunately for inferentialism, the nature of language as a medium of communication between individuals who disagree with each other in indefinitely various ways undermines attempts to make accepting a given inference a necessary condition for understanding a word; therefore, by (Have), it undermines attempts to make accepting the inference a necessary condition for having the concept.[207]

This is just to say that Boghossian's conception of entitlement cannot make sense of rational thinkers who disagree about logic and still understand what their respective opponents are saying. There are knock-down-drag-out arguments between philosophers about whether a thinker is justified in applying logical concepts like the concept of negation in one way rather than another. And arguing over logical concepts at all requires that it is possible to make diverging claims about their possession conditions while still understanding the words which express the disputed concepts. Otherwise, there would be, for example, no intelligible controversies about the law of excluded middle, distributivity or the law of non-contradiction between classical logicians and the various proponents of non-classical logics.

Such disputes are also disputes about conditions under which we may retract an entitlement about self-ascriptions of concept-possession. Classical logicians, for example, do attack deviant logicians' claims that they reason in accord with deviant rules, because that leads them—so the classical logicians argue—to assume a counter-intuitive ontology. They can, so the classical logician might continue, not coherently self-ascribe reasoning in accord with deviant rules and, at the same time, self-ascribe a rational view of reality. The main problem, as I see it, is that entitlement can sometimes be retracted by a community—especially if the inferential transitions supposed to entitle a thinker are not surveyable or other evidence for rational or cognitive failures appear. In severe cases, long disputes—just like those between classical and deviant logicians—ensue and for such cases there might be no common ground anymore which settles what counts as a rational failure or as a surveyable inference.

I take this to be a decisive objection and conclude that Boghossian has no viable

[207] Williamson 2003:46

conception of objective grounds flowing from his implicit definitions or his meaning-entitlement connection which could possibly buttress his conception of objectively correct language use. The main reason is that Boghossian's proposal undermines attempts to make sense of the sort of disagreements that are the bread and butter of philosophers of logic.

But then, is there any way in which we can hope to explain the transfer of warrant as discussed here? More specifically, can my Wittgensteinian approach hope to do better? I shall argue that we have basic beliefs about at least some laws of logic and that logical laws provide a footing for objectively correct language use, even though the beliefs can be revised if the circumstances demand it. It is important, then, to understand how evidence and other people's reactions influence the transfer of warrant when logical laws are applied. In the next section I shall, therefore, explain under what conditions transfer of warrant by virtue of the internal relation between a logical concept and its use in inferring fails.

Entitlement by Proof, Truth and Common Ground

Consider two points I kept mentioning from the beginning of the present discussion of Boghossian's views:

1. *Proof-Truth Connection:* Concerning justified beliefs about inferential validity, justified belief in truth should be expected to rest on proof and justified belief through proof must move us from truths to truth.
2. *The Blame-Acceptance Connection*: Being epistemically blameless or blameworthy partially depends on what other people are ready to accept during a conversation.

The proof-truth connection implies that justification sometimes comes from truth, because basic truths about logic enable us to distinguish between valid and invalid proofs. The proof-truth connection also implies that justification sometimes comes from proof-procedures for non-basic truths: when we want to know whether a statement in a formal language is true, we employ proofs and infer them from other true statements. In deductive reasoning where we do have a transfer of warrant, the proof-procedure must lead us from justified belief about the truth of the premises to a newly justified belief about the truth of the conclusion. If deductive inferences should be useful outside of formal systems—if they are to be applicable at all—the intuition must be preserved that we sometimes know whether a statement is true before we have a proof and that we sometimes know first (by invoking some conclusive evidence, reliable testimony or verification-principles) how to decide whether a statement is true or false.

The blame-acceptance connection holds that other people's reactions—what they are

prepared to accept—matter for transfer of warrant. In a specific context in which a thinker infers, the justification for believing the conclusion and the justification for believing the premises must eventually be grounded in the context in which the thinker claims that the inference is acceptable. But note that the justifications already count as grounded in the context if nobody objects to them or if a sceptic about these justifications does not provide sufficient evidence which determinately topples the justifications. Premises and conclusions are therefore still independent enough to make inferences informative. Nevertheless, certain assumptions about what is *common ground* between the participants must be made.

In order to prepare the grounds for a new account of transfer of warrant, 'acceptance' and 'common ground', as used here, must be explained. To accept a statement is to treat it as true and to ignore (at least temporarily or in a limited context) that it is false, because there is no evidence that shows that the statement is false. Of course, not every statement is acceptable in that sense. But, as I have argued, self-ascriptions of certain forms of reasoning or concept-possession certainly are. The notion of common ground, on the basis of which certain statements are acceptable, is a bit more technical:

> (Common Ground)
> It is common ground that φ in a group if all members *accept* (for the purpose of the conversation) that φ, and all *believe* that all accept that φ.[208]

As mentioned above, inferring and discussing or thinking about the validity of an inference depends on what one thinks to be entitled to. A thinker is entitled to make a statement if the proposition expressed by it is common ground and if this entitlement does not only stem from inferential links built into concepts. Entitlement is also based on what other people are prepared to accept and it is based on what evidence is available.

This, then, is an alternative account of default reasonable belief: beliefs about common ground are reasonable by default, as they (they may by factually correct or not) make talking to other people possible at all. Any language user bases her linguistic behaviour on assumptions about the common ground—that makes her a reasonable language user (no matter whether she can make those assumption explicit or not). Even if such a belief was wrong, it was at least justified in the context, the speaker thought herself in. Her being reasonable demands adjusting her language use to make it acceptable in a given context.

Furthermore, if the validity of all instances of *modus ponens* is common ground (as, for example, in an introductory course in formal logic), all participants are committed (in the example, by partaking in the course) to take its validity for granted. Correctly believing that

[208] The notions of acceptance and common ground are borrowed from Stalnaker 2002:716 and Stalnaker 1984:79-81, but no further theoretical implications follow from this.

one is committed to a specific logical law makes it a component of the context, assailing it means attempting to change the context. Relative to a specific context, my correct beliefs about inferring are as certain—and, *pari passu*, as objective—as they can be.

As common ground is never in the head of any single participant, the account to be sketched here is a form of social externalism about warrant for the semantic correctness of token language usages (such a specific use is marked by φ in the stipulation of common ground): every speaker depends on the reaction of the other participants in order to find out whether his estimations about the common ground are acceptable and he must be prepared to adjust his linguistic behaviour to match the common ground if his estimations turn out to be wrong.

The point of the account is that default reasonable beliefs about how one infers are good—i.e. one's inferences transfer warrant from premises to conclusions—as long their epistemic status is not toppled because one or several requirements mentioned above have not been fulfilled. In summary, a deductive inference performed by a speaker S in a specific context C is warrant-transferring just in case the following two conditions are fulfilled:

1) S's justification for believing the premises is suitably independent of his justification for believing the conclusion, but both—premises and conclusion—are common ground after the conclusion has been drawn
2) S is justified in believing that the inference is valid, because the inference can be expressed through a basic statement or because S is justified to believe that the inference is actually truth-preserving

The first condition is simply that the blame-acceptance connection must be preserved and the second condition is simply that the proof-truth connection must be preserved. Note that these conditions do not contain any claims about how the validity of inferences is constituted and how their factual correctness (if there is such a thing) should be explained. It only provides an explanation of the conditions under which we can have a justified belief that a specific inference is warrant-transferring. That is enough for my purposes here, because warrant transferring inferences can secure semantic correctness for extrapolations from a finite set of language uses to new situations. And this is exactly what was needed all along, as it provides us with conditions under which justified beliefs in inferential links secure objective grounds on which we may rely in our language use.

The new proposal is an extension of Boghossian's blind reasoning. The arguments that led to it showed that the transfer of warrant from premises to conclusion is sensitive to how thinkers interact with the world and their peers in specific contexts. Combining these ideas with Boghossian's take on analyticity and *a priori* knowledge yielded the new conditions

under which transfer of warrant from premises to conclusion is guaranteed.

4) Conclusions

Part B of the thesis assessed the answers that realist approaches to correct language use can provide when faced with issues surrounding the justification and objectivity of language use. That took us through considering general points about theories of meaning, realism-antirealism debates and objective grounds. We found that semantic realism faces considerable difficulties and we were eventually led to dismiss it. It was, however, argued that retaining a common sense realism is mandatory.

One important upshot of the discussion was that metaphysical debates require an account of how warrant is transferred in deductive reasoning. Metaphysics cannot be a secluded field of philosophical research, because metaphysical reasoning presupposes that warrant is actually transferred in deductive reasoning—and such transfers of warrant cannot be explained, as we have seen, in purely metaphysical terms.

In order to prepare the grounds for explaining transfers of warrant, the notion of basic concepts was introduced and discussed. The upshot was that there is a viable notion of a basic statement, i.e. a statement the use of which is immediately warranted. Building on that, we moved on to Boghossian's account of basic statements which in turn led us to consider his particular take on analytic truths and *a priori* knowledge. It was then shown how that is supposed to yield a viable conception of objective grounds, which can provide a footing of objectively correct language use.

Boghossian's proposal suggested that knowledge of inferential validity is based on epistemic principles for which valid rules of inference, such as *modus ponens*, are defining. That rule-circular approach was found to be wanting, as it construes the understanding of logical concepts in an illicit inferentialist way. An alternative was proposed. The alternative does not make any new suggestions concerning how inferential validity is constituted, but it builds on how language users settle disputes about epistemic correctness in an objective way. Transfer of warrant is secured by the same considerations that also inform language use. It is therefore correct to infer that our linguistic competence, which is the power to use language as we do, does secure the transfer of warrant when inferring.

This puts us into a new position. The only approach to correct language use from part A that remains is my Wittgensteinian proposal. That solution does, however, take for granted that speaker have some linguistic expressions readily available.

We have seen in part A that my Wittgensteinian proposal can reject any alleged obligation to say something about the constitution of linguistic facts, precisely because it is a sceptical solution. Accounting for objectively correct language use does not require appealing to facts in the sense that the internal relations between words and their applications need a further mediating element in order to be explainable. But apart from that, another constitutive question must be raised. How do linguistic expressions become available for use? And how is accounting for that related to the idea that explaining transfer of warrant as proposed above provides us with the mark of objectively correct language use? After all, we have only explained on what grounds an extrapolation may count as objectively correct, but we have not explained what constitutes extrapolations, which may be assessed in this way. True, it may turn out that questions surrounding the constitution of extrapolations are empirical questions about language acquisition and about the acquisition of other cognitive powers——but whether these are empirical issues or not is also a philosophical question.

A central aspect of being linguistically competent is that people have means of expressing themselves—words, phrases, sentences—available. Dummett, for one, took it for granted that questions surrounding linguistic competence, or 'knowledge of language' as he prefers to call it, are intimately connected with issues surrounding objectivity, inferential validity and realism-antirealism debates. We have also seen that our best take on objective grounds—and, *pari passu*, objectively correct language use—presupposes much about how language is used. This does also constrain how we are to explain linguistic competence. A careful enquiry into how linguistic expressions become available could elucidate linguistic competence and explain more precisely how language and logic are related. These are the topic of part C.

Part C

Linguistic Competence and its Proper Study

1. Linguistic Competence

The upshot of part A of the present thesis was that there are only three viable accounts of correct language use. Part B of the thesis focused on questions surrounding objectivity that had arisen in that context. It was mainly concerned with what objectively correct language use comes to. Going through a wide range of Dummettian considerations allowed us to seriously doubt the anti-normativist approach to correct language use. Further inquiries into the epistemology of logical laws revealed that of the two remaining proposals—Boghossian's robust realism plus epistemic rules and my Wittgensteinian proposal—only my proposal passes muster.

One might assume that this is enough, thus succumbing to the illusion that we have established a sufficiently complete view. All that remains to be seen, one might think, is how far we can run with it. But the state of affairs is not quite so. As matters stand right now, chances are that we stumble over the first obstacle and hit the ground. For it is by no means clear what exactly we use, when we use language. Do we use sentences, phrases, words, sounds, signs, or symbols? The need for choosing between these options is real, bearing in mind that my proposal plays on the idea that we have linguistic expressions available for use and that this includes that we can extrapolate new uses from old ones. The capacity to extrapolate will also have to be related to how we draw deductive inferences and it is not immediately clear how that relation can be fleshed out. Answering questions along these lines requires further considerations about what someone can do who can use language.

Another related issue stems from our discussion of the epistemology of logical laws. My account of how warrant is transferred from premises to conclusion in *modus ponens* does not tell us how logical laws are constituted. It was merely suggested that correctly inferring is part and parcel of the ability to use language. But how exactly inferring is related to extrapolating new uses of expressions from old ones remains unclear. This requires further investigations as well.

Michael Dummett and others often write about knowledge of language instead of linguistic competence. In an attempt to pry apart those two notions, I shall start by giving a short overview of Gareth Evans' discussion of knowledge of language. This will make plausible that a dispositional account of competence can in part explain what the ability to use language comes to. It will then be argued that construing linguistic competence along the lines suggested by Hauser, Chomsky and Fitch (2002) can explain what sort of linguistic expressions we have available for language use. Furthermore, it will be argued that such

linguistic dispositions can explain how we extrapolate new expressions—strings of sings and sequences of sounds that one might employ—from old ones. This is a highly controversial claim, as the Wittgensteinian roots of my proposal are traditionally believed to be diametrically opposed to anything like a Chomskian approach to linguistic competence.

Arguing for such a Chomskian perspective on linguistic competence will also prepare the grounds for the pivotal idea that linguistic dispositions constrain logic and inferring. It will then be claimed that my account of how warrant is transferred from premises to conclusion explains what semantically correct inferring comes to. The final picture has it that linguistic dispositions furnish language users with expressions and constrain inferring by determining how new strings of signs and sequences of sounds can be extrapolated from old ones. The account of transfer of warrant will then settle matters about which extrapolations count as semantically correct.

Knowledge of Language

What difference, if any, is there between knowledge of language and linguistic competence? An overview over the debate on how to construe the first provides us with the necessary elements to make sense of both notions. The discussion of Dummett's views on theories of meaning led us to see that a truth-conditional conception of meaning and understanding comes with a set of particular problems. But there is one issue that has not been considered so far. The truth-conditional approach comes with a commitment to the idea that an appropriate theory of meaning be compositional. What does that amount to? The claim has two parts. On the one hand, a compositional theory has a finite set of axioms that are not simply adopted from logic. On the other hand, a compositional theory makes clear how the meaning of a declarative sentence can be derived from the axioms in a way that exhibits the semantic constituents of the sentence and how they are related.[209] At the end of the day, meaning is thought to be a function of components and structure.[210]

It is sometimes assumed that it is clear that a compositional theory of meaning has advantages over any non-compositional explanation of meaning, but that assumption seems funny, because language users utter meaningful sentences without having to derive the

[209] Cf. Miller 1997: 146

[210] The primary difference between a purely truth-conditional theory of meaning and Dummett's verificationism consists in a different conception of what the right structure is. So, any theory of meaning (in Dummett's use of the expression) is a theory that tries to explain meaning as a function of components and structure. Semantic realism envisages a structure in sync with classical logic and Dummettian verificationism envisages a structure in sync with intuitionist logic.

composition of their sentences from any axioms. *Prima facie*, non-compositional explanations of meaning could offer better explanations of what people actually do when they use language meaningfully. So, why should a compositional semantics be in any better position to explain knowledge of language than a non-compositional one?[211]

If we take in considerations of the last two parts of the present thesis, compositionality does not look like a promising idea. First of all compositionality does not solve—but rather invites—questions concerning the sort of extrapolations language users make. Remember, proponents of a truth-conditional approach can, for example, be pressed to provide further reasons to defend the claim that they can explain grasping as extrapolating, which runs as follows:

> grasping a proposition or the content of a word centrally involves extrapolating a possibly indefinite number of new applications based on a finite number of known cases.

It was Kripkenstein's sceptic who first taught us that this is a serious challenge, as there is no fact which supports the claim that correct language use can be accounted for in terms of compositionality. The question compositionalism must answer is: if meaning is a function of components and structure, then how can we acquire these components and these structures and how do we draw on them to explain and justify language use in novel cases? The only possible way to answer for a truth-conditionalist consists in finding components and structures which can be fully explained in terms of truth-conditions. Verificationists, on the other hand, may adduce facts about how we draw on the relevant components and structures and may thus think that they have a better explanation. But Kripkenstein has shown that no reference to facts of any kind will provide a satisfactory general answer to these two questions. So compositionalism does not look promising, for it plays into the hands of Kripkenstein's sceptic.

We shall now turn to Gareth Evans's work on why compositionality is still relevant. Evans argues that a suitable conception of linguistic dispositions can shed light on how to construe compositionality—it is supposed to do so, because the relevant dispositions allegedly constitute compositionality. There is much to say about this. First and foremost, it must be explained how this view can deal with Kripkenstein's sceptic.

Let us begin with knowledge of language by reconsidering that the term 'knowledge', as it is used here, refers to a propositional attitude-state. What does it mean to conceive of knowledge of language as a propositional attitude-state? Michael Dummett makes much of the idea that knowing the axioms specifying a theory of meaning are propositions one

[211] Wright asks this question in his 1980, 1986a, 1986b and his 2001.

knows.[212] Having, then, the practical ability to use a language specified by these axioms allegedly amounts to tacitly knowing the propositions expressing how meaning, being a function of components and structure, is constructed behind the curtains of how languages are actually used.[213]

It is this view against which Evans raised objections. The view seems to answer worries about compositionality, because the acquisition of a language then boils down to acquiring tacit knowledge of the relevant axioms. But it is still unclear how a language user can draw on this propositional knowledge in order to use a language, especially if faced with novel applications of known sentences or completely unfamiliar sentences. After all, a language user is supposed to have *tacit* knowledge of her language and is, thus, not immediately supposed to be able to express the relevant axioms of her theory of meaning. So, how could one possibly draw on such tacit knowledge? Not in any relevant sense, because knowledge of language is only manifested in language use. Normally, what people believe and know is of the sort that it can also be desired, wished for or intended. What I know when I know that the weather is good is also something that I desire when I wish that the weather be good. And my belief that I need to buy bread can give succour to the intention to buy bread. What people believe and know can, in principle, also form the basis of a motivation. Knowledge of language, however, is different.

My knowledge of German can never figure in desires or intentions in the same way. It is, nevertheless, true that knowing that 'Das ist Brot' is true if and only if this is bread can inform some beliefs about German and may help forming an intention to buy the item in front of me if the shopkeeper informs me in German that it is indeed bread (and not cake). But knowledge of German cannot figure in my desires unless these concern German or its use, whereas my knowledge about the weather can. In other words, knowledge of language cannot form the basis of a motivation in the same sense as knowledge about what facts obtain in the world.

The point is that knowledge of language does not inform intentional actions, plans or motivations in the same way as propositional knowledge about the world does, because knowledge about the world does normally figure in practical reasoning, whereas knowledge of language only figures in practical reasoning in exceptional circumstances. More importantly, knowledge about the world furnishes me with contents which I can desire to be satisfied, intend or wish for and these contents are therefore necessary to bring personal motivation into practical reasoning. So there is an obvious asymmetry between knowledge of

[212] Especially in Dummett 1976:36
[213] Cf. Miller 1997:147

language and any other knowledge I have.[214]

Gareth Evans says more about the insight that knowledge of language, if it were indeed propositional, is inferentially insulated in a way that other kinds of knowledge are not. His take on this is best explained through an example. Assume that elliptical sentences are not available and that the axioms we tacitly know specify that predicates are satisfied by one argument only. In such a language 'knows' or 'John knows Tim' are not well-formed, because they are ruled out by the axioms. Knowing this is constitutive of what counts as using that toy language, but it cannot interact in any fruitful way with genuine beliefs. The genuine belief that there are relations between entities, such as the relations of John standing left of Tim or Tim standing between John and Mary, must be considered independently from the axioms constituting the expressibility of those beliefs in the toy language, unless further reasons can establish such a dependence. Furthermore, it must remain open whether other beliefs, such as the belief that Tim cannot stand at the same time on the left and on the right of John, are rendered contentless by the axioms tacitly known. If tacit knowledge were a propositional attitude-state, Evans argues, it would be inferentially insulated like that. It would, I surmise, be conceivable that we can always believe more than what our tacit knowledge of language furnishes us with. A Dummettian meaning-theorist cannot make much sense of this, because the meaningful content of beliefs and the content of meaningful expressions both obtain their content by virtue of knowledge of language.

There is another point which I have already raised when I first discussed Dummett's take on knowledge of language. Propositional knowledge depends on a one-way power to recognise facts. One-way powers are, to rehearse that distinction, passive cognitive powers that are not subject to human volition. Knowledge of language, on the other hand, is necessarily subject to human volition, because it is an essential feature of my knowledge of language that I can simply decide to utter a nonsensical sentence, lie or breach other proprieties of communication—in those cases, I consciously neglect semantic and pragmatic facts because I do know the language which I misuse. It is not clear at all how a theory of meaning can handle a phenomenon that is necessarily subject to human volition. Seen from that perspective, Dummett has simply made a category mistake by not distinguishing between one-way and two-way powers.

So, we have seen that tacit knowledge must not be construed as a state of having a certain propositional attitude. But how precisely do these points connect to issues surrounding

[214] Cf. Evans 1981: 338-9, who does not recognise that knowing the proposition that 'Das ist Brot' is true if and only if that is bread may, in exceptional circumstances, figure in practical inferences. So, for Evans, knowledge of language is more strictly insulated than I have suggested here.

compositionality? Evans thinks that not every supporter of compositionality is wedded to Dummett's pernicious view about knowledge of language. Let us turn to how Evans conceives of an allegedly innocuous conception of dispositions explaining compositionality.

According to Evans, the derivational routes from the axioms of a compositional theory of meaning to its theorems should, in some sense to be specified, reflect the causal routes leading from the dispositions associated with the language's names and predicates to the intentional states associated with the whole sentences available for language use.[215] Motivating this idea involves reference to two distinct ways in which sentences are composed from axioms and supplied with meaning. Consider a language L with three predicates ('likes fish', 'likes trees', 'likes eagles') and three names ('John', 'Hans' and 'Gertrud'). Combining the names ('j' for 'John', 'h' for 'Hans' and 'g' for 'Gertrud') with the predicate 'likes fish' (abbreviated as 'F') we can build three sentences: Fj, Fh and Fg. Taking all predicates in (and abbreviating 'likes trees' with 'T' and 'likes eagles' with 'E'), we get 9 sentences *in toto*:

Fj, Fh and Fg;

Tj, Th and Tg;

Ej, Eh and Eg.

We make our toy language L meaningful by assigning truth-conditions to our sentences. We thus get the following set of truth-conditions:

'Fj' is true-in-L iff John likes fish.

'Fh' is true-in-L iff Hans likes fish.

'Fg' is true-in-L iff Gertrud likes fish.

'Tj' is true-in-L iff John likes trees.

'Th' is true-in-L iff Hans likes trees.

'Tg' is true-in-L iff Gertrud likes trees.

'Ej' is true-in-L iff John likes eagles.

'Eh' is true-in-L iff Hans likes eagles.

'Eg' is true-in-L iff Getrud likes eagles.

Now, the set of truth-conditions can be specified in two ways, yielding a listiform specification and a recursive specification respectively. And because both specifications deliver the same set of truth-conditions, we speak of extensionally equivalent specifications. Here they are:

(T1)

The listiform theory lists each of the 9 members of the set (as just done above) and has, hence, 9 axioms.

[215] The wording is adapted from Miller 1997:155 and is based on Evans 1981:329-331.

(T2)

The recursive theory lists each predicate and each name and supplies those 6 axioms with a further axiom specifying in general how to combine subjects and predicates. It has 7 axioms.

T2 has less axioms than T1 and still delivers the same set of truth-conditions. For languages with many more predicates and names, anything like T1 is hardly of practical value. The reason why T2 is more economical lies in the additional axiom which can be spelled out like this: a concatenation (°) of any predicate (Φ) and any name (α) results in a true sentence iff the object denoted by the name satisfies the predicate.

Recall that we started this section by asking why compositional theories are to be preferred to non-compositional theories. Counting T2 as a paradigmatic case for compositional theories and the listiform specification T1 as paradigmatic for non-compositional approaches, we are asked for reasons why T2 should be preferred to T1. A good and simple answer is that compositional theories are more economical, because listiform theories are not practical for richer languages and, often, hardly feasible at all. But Gareth Evans, maybe looking for something deeper, claims that we should adopt a criterion for deciding between T1 and T2 on empirical grounds. His idea is that viable theories of meaning do not only give us the correct meaning-specifications, but are also empirically verifiable descriptions of the dispositions governing correct language use.

Now, this does not look like a good idea in the context of Kripkenstein's sceptic. Was it not shown, after all, that dispositionalist approaches are futile? Yes, but only if we take dispositions as mediating between the meaning of linguistic expressions and how they are used correctly. Dispositions governing the use of linguistic expressions were found to be admissible if they are simply used to explain that there is an internal relation between a disposition to use an expression in such-and-such a way and what counts as using an expression in such-and-such a way. The set of truth-conditions that T1 and T2 produce can be taken to provide valid descriptions of such dispositions, because they simply express the internal relations between 9 propositions (Fj, Fh, Fg, Tj, Th, Tg, Ej, Ea and Eg) and what makes them true.

This need not amount to a truth-conditional meaning theory in Dummett's sense, for such a theory would presuppose Dummett's conception of knowledge of language. So, common worries about truth-conditional accounts of meaning need not necessarily apply to Evans's proposal. Note, however, that the proposal does still not capture those essential aspects of the psychological powers making up linguistic competence which are subject to human volition—it only captures those aspects of our psychological powers which provide

what human volition plays on. Even if I am disposed to say truthfully that Gertrud likes eagles iff Gertrud likes eagles, I may volitionally act against this disposition, lie and say that Gertrud does not like eagles. Evans thus provides us with an interesting way of explaining dispositional aspects of the psychological powers governing language use, even though we should keep them apart from the aspects of our psychological powers that are subject to volition.[216] We may not infer that reference to dispositions helps with explaining what the ability to use a language is.

Even if this last point is observed, one must still be extremely vigilant when pursuing Evans's line of thought. Evans claims that empirical investigation should allow us to decide between T1 and T2. Such an investigation should therefore allow us to decide between descriptions of dispositions. The first sort of evidence that an empirical investigation might provide is causal: if the causal explanation of a subject's V-ing in circumstances C always requires reference to some state S, the evidence will suggest choosing T2. But if there are nine states causally explaining a subject's V-ing in circumstances C, the evidence will suggest choosing T1. Now, if the causal explanation adduces neurological evidence, we have to be careful not to assume that the states just invoked are mediating elements between some disposition to use a linguistic expression and its manifest use. That would make the proposal straightaway subject to Kripkenstein's anti-dispositionalist challenges and, *pari passu*, inadmissible as buttressing an account of semantic correctness as questioned by the sceptical paradox. Mental or neurological states must count as being correlated with dispositions and not as being constitutive of them.

There are two other sorts of evidence Evans considers. The more important one is evidence from acquisition. If, during acquisition, the child's mastery of Fj, Fh and Tg does neither involve mastery of Tj, Th or Fg (and so on), the child's competence cannot be described with T2, but could be described with T1 (although that would be subject to further tests). The last sort of evidence Evans mentions is evidence from loss. If, due to some accident or other impairing circumstances, a subject looses mastery of Fj, one would have to check whether consequences for other sentences ensue. If mastery of all sentences is gone, T2 describes the competence the subject had. If mastery of the eight other sentences is still displayed, T1 is correct.

So, Evans has come up with an empirically respectable notion of linguistic

[216] Miller 1997:171 regarded it as an open question whether anything like Evans's dispositions passes muster when faced with Kripkenstein's sceptic. But if looked at from a perspective for which the distinction between internal and external relations is admissible, Evans's dispositions do pass muster.

dispositions that is not necessarily subject to Kripkensteinian scruples. Knowledge of language is just this. Linguistic competence—as I shall call the dispositional aspect of language use from now on—will be any coherent set of linguistic disposition along the lines Evans suggested, which eschews commitments to a theory of meaning in Dummett's sense. My Wittgensteinian proposal requires some sort of linguistic competence in order to explain how linguistic expressions become available for use and Evans provides us with an interesting starting point.

All would seem well, if there were no objections to Evans's proposal. We turn to them now in order to assess whether the objections threaten the notion of linguistic competence.

From Knowledge to Competence

The previous section established two important results. A first result is that knowledge of language, because it is tacit, cannot be a propositional attitude-state. A second result is that Gareth Evans has provided an empirically respectable notion of linguistic dispositions which is not subject to Kripkensteinian worries and enables a notion of linguistic competence which suits my purposes. Crispin Wright has three objections against Evans's dispositional account of knowledge of language to which we should turn now in order to assess Evans's proposal more thoroughly .

The first objection Wright mentions, although he does not claim that it is insurmountable, has it that Evans's account is viciously circular.[217] Wright builds on the *prima facie* sensible requirement that dispositional accounts explain what the dispositions in question do and under what circumstances they are manifest. Turning to knowledge of language, Wright supposes, the requirement leads to a worry. Characterising under what circumstances a linguistic disposition is manifest involves characterising what those dispositions are dispositions to do and vice versa. Wright thinks that this prevents us from explaining the disposition after all, for an adequate explanation must characterise what the dispositions are to do independently of the circumstances under which they are manifest. The worry appears if the circumstances under which dispositions manifest are also to be characterised in terms of what the dispositions are to do, for here the allegedly vicious circularity gets established.

According to Evans, we legitimately explain what it is to use a name like 'Gertrud' in terms of the linguistic dispositions we have set down in the recursive theory T2. The worry

[217] Wright 1986b:233

appears if we explain what it is to have the disposition described by T2, for it turns out that that can only be explained by pointing at the circumstances under which the dispositions manifest that are described by T2, i.e. using 'Gertrud' correctly. Wright believes that an adequate explanation in dispositional terms requires more and argues, pace Evans and me, that what a disposition is a disposition to do must be accounted for independently of the circumstances in which it will be manifest.

Wright's worry would of course hold sway if dispositions must be characterised in terms of external relations: that would involve a relation between a disposition, the circumstances under which it manifests and what it is a disposition to do. This is, however, not so. Characterising dispositions, abilities or psychological powers in terms of internal relations does involve the sort of circularity that Wright has noticed and that is perfectly licit: a disposition can be characterised through an internal relation between what it is a disposition to do and the circumstances under which it manifests. I have discussed this point at length in part A of the present thesis. The circularity in Evans's account is hence not vicious, but virtuous because it preserves perfectly common intuitions about psychological powers involved in language use.[218]

Nevertheless, Wright has two more objections. The second objection questions whether a specific causal structure is relevant for deciding between the two kinds of semantic theories—compositional (i.e. recursive like T2) and non-compositional (i.e. listiform like T1). The leading idea is that the causal structure exhibited by T2 dispositions may just as well be described in terms of T1. This must be denied, for mere conceivability of both dispositions exhibiting the same causal structure in experimental situations does not suffice here.[219] Mere conceivability does not suffice because of Ockham's Razor: if we have, given some empirical explanation, a more parsimonious one explaining the empirical data, we should opt for the more parsimonious one. And because—if we focus on linguistic dispositions—any recursive characterisation is (apart from expressively crippled toy languages) always more parsimonious than its listiform competitor, Wright's objection does not apply. The point is, of course, that listiform characterisations like T1 have more axioms than recursive characterisations like T2 and are therefore easier to survey.

Wright's third objection focuses on Evans's idea that every axiom of a compositional theory describes the disposition governing the use of the expression it corresponds to. If that were true, T2 could be reduced to only 6 axioms (three for the names plus three for the predicates), because the axiom specifying recursion does not describe the use of a

[218] This is similar to the view Miller expresses in his 1997:158-9.
[219] See also Miller 1997:157-63 who is more patient with Wright.

corresponding expression. But then again, T2 without the axiom specifying recursion cannot fully characterise the use of more complicated languages, as we will have no means for deriving the truth-conditions for a much larger number of statements. So, Wright infers, something is wrong with Evans's idea.

Consider again the wording chosen above for the axiom specifying recursion: a concatenation (°) of any predicate (Φ) and any name (α) results in a true sentence iff the object denoted by the name satisfies the predicate. We can now simply apply that schema to the specification of each predicate, yielding a new theory T3 which has, if compared with T2, three new axioms for the predicates:

- for all names α, the concatenation (°) of α with F yields a true sentence iff the object denoted by α satisfies the predicate 'likes fish'
- for all names α, the concatenation (°) of α with T yields a true sentence iff the object denoted by α satisfies the predicate 'likes trees'
- for all names α, the concatenation (°) of α with E yields a true sentence iff the object denoted by α satisfies the predicate 'likes eagles'[220]

The idea here is, obviously, that we can build recursion into the specification of each predicate. Most commentators take this to take care of the objection at a relatively low cost.[221] But that does not mean that we have reached our goal with T3. Even though Evans' proposal can explain how we are disposed to linguistically respond to facts, T3 takes for granted that there are names and predicates and that they can be concatenated to form simple statements which can be true or false. Names and predicates have distinct syntactical roles and Evans's dispositionalism just presupposes that.

The aim of the present part of the thesis is to explain how linguistic expressions—strings of sings and sequences of sounds—become available for language use and how we extrapolate. That is what an account of linguistic competence was meant to deliver. Evans's proposal can only explain part of it. Theories like T3 can only explain how we are disposed to use names and simple predicates to derive new statements and decide whether they are true based on what the names and predicates mean. T3 (or anything like it) cannot explain how other linguistic expressions become available for use and how words are ordered in expressions independently of the expressions' truth-aptness. There will be no such explanation forthcoming, because factual correctness—as captured by truth-conditions—is not paradigmatic for semantic correctness. Even though T3 may explain how some factually correct extrapolations can be made through recursion, that does not necessarily help

[220] This solution follows the spirit of Martin Davis 1987.
[221] See Miller 1997:163-7.

explaining other cases of correct extrapolations for which truth and falsehood have no role to play (but for which meaning still matters).

Perhaps we may take recourse to other dispositions, in order to deliver what T3 does not. A revised account of linguistic competence (comprising all aspects of language use that can be explained dispositionally) will contain Evans's dispositions, yielding an account of how we respond linguistically to obtaining facts, and other dispositions, explaining word-order in general and extrapolations of new linguistic expression from old ones. The second sort of linguistic dispositions supply exactly what my Wittgensteinian proposal needs: linguistic expressions (sentences, ellipses, etc.) and principles of deriving new syntactically well-formed expressions from them. A revised account of linguistic competence will thus also invoke dispositions which govern syntactical correctness (i.e. the grammatical well-formedness of sentences in natural languages). Dispositional terms will thus be used to describe syntactic constraints on language use and correct extrapolations in language use will then have two components: syntax governing what counts as an extrapolation at all and semantics governing what counts as a *correct* extrapolation. Approaches along these lines have usually drawn on Noam Chomsky's work on linguistic competence. It is this approach to which we turn now.

The Chomskian Perspective

For Noam Chomsky, studying linguistic competence has nothing to do with studying social manifestations of it. The central tenet of his approach to theoretical linguistics is that the defining aspects of linguistic competence are not in any way related to social conventions or the purposes of communication. This is obviously not in accord with a common sense notion of language and Chomsky is fully aware of that. In order to distinguish common sense views on language from what he perceives as the proper object of study for theoretical linguistics, Chomsky has introduced the technical distinction between I-language and E-language. 'I-language' refers to linguistic competence, the language faculty, as far as he finds it suitable as an object of scientific enquiry. 'E-language' refers to languages as conceived by common sense, i.e. shared linguistic practices.

Studying the I-language means studying a pre-wired mechanism, the language faculty, which comes with a set of toggle switches (also called parameters) that are set depending on the environment into which a potential language user is born. The setting of each toggle switch and the way the settings of all switches can be combined constitutes the range of

possible syntactic dispositions—they are the conditions of possibility Chomsky envisages for language. A linguist is supposed to study this mechanism, to find out what the initial setting of the switches is, to explain what possible settings can be triggered by the environment during first-language acquisition and how such a setting can be triggered.[222]

Chomsky defends the idea that studying the I-language is part of a naturalistic study of the human mind and that facts about the mechanism in question are facts about the language faculty (i.e. the linguistic competence) of an individual. Facts about the language faculty are facts about innate psychological powers which are not sensitive to one's upbringing or the environment in which a first language is acquired. This makes perfect sense if one recalls that the language faculty merely contains the conditions of possibility Chomsky envisages for language. So, facts about the language faculty are facts about human biological endowment; the environment, in which a potential language speaker grows up, only governs how that endowment enables individuals to acquire a specific mother tongue.[223]

This suffices already to perceive some important points about Chomsky's programme. First, Chomsky proposes an enquiry into linguistic dispositions which is similar to Evans's, because linguistic dispositions are to be studied empirically and because the dispositions in question are (as I shall argue) not necessarily subject to worries bound up with rule-following. Secondly, Chomsky is not committed to any truth-conditional conception of meaning, because the initial state of the language faculty cannot—due to its insensitivity to what is the case in the environment (i.e. the conditions under which sentences are true)—be captured by truth-conditions. Thus, the sort of syntax that the language faculty determines is not analogous to the logical syntax of classical first-order logic, because that logical syntax is most easily introduced through truth-tables and the syntax determined by the language faculty is not. If the syntax of classical logic has anything to do with the syntax of natural languages, logical syntax defers to what the language faculty provides.

From this we can infer that if truth-conditions played any role in Chomsky's scheme, they would defer to parametric settings. And more generally, any plausible account of correct language use must defer to parametric settings. This is not to say that semantic correctness is fully determined by the language faculty, but simply that the latter is necessary for the former. Whether Chomsky's dispositionalism supplies what my Wittgensteinian proposal requires from an account of linguistic competence obviously depends on the details of what the language faculty comes down to.

It is important to be aware of a caveat Chomsky makes. His talk of a pre-wired

[222] Ludlow 2001:419
[223] Op. cit. p. 424

mechanism can be misleading if interpreted in analogy to the sort of mechanism we find in artefacts. Especially the idea that a computer model of the language faculty would be a desirable research result is something Chomsky rejects. Answering questions about the nature of artefacts, he argues, requires explaining the designer's intent, standard use and similar things. And we can only speak of malfunction if we have answers along these lines. Natural objects, on the other hand, are not accounted for like this. The computer analogy breaks down, because the language faculty is, in Chomsky's eyes, a natural object just like organic molecules and not at all an artefact. It is for this reason that he also rejects the idea that computer models can fully capture the nature of the language faculty.[224]

The upshot from this is that we must not read issues known from mechanical artefacts into natural, especially biological, objects we describe in mechanistic terms. Doing so would require further arguments which show that some issue concerning mechanical artefacts (or computer models) is indeed relevant for the study of biological objects. And it is likely that such arguments violate the distinction between mechanistic descriptions of objects, which need not necessarily have mechanistic natures (but are usefully described so), on the one side and the plans determining the design of mechanistic artefacts on the other. Whether the distinction can be upheld in the case of the language faculty is controversial. Below, I shall argue that it is to be upheld at any price, whereas Chomsky weakens it by equating mechanistic properties with computational properties, which he actually does ascribe to biological systems.

Also interesting for present purposes is the attitude towards semantics that Chomsky's focus on I-language comes with. It leads him to suspicion about semantic realism and, more specifically, the requirement that language use be modelled on the application of words to objects in the external world. Wittgenstein also rejects that requirement in his *Philosophical Investigations*, where it is a primary target of his attacks.[225] Chomsky has the same target but argues against it in a different way than Wittgenstein does. For Chomsky, the idea is that if the nature of the language faculty is insensitive to the environment of an individual (because it is an important part of that individual's biological endowment) and if the nature of the language faculty is the main interest of proper linguistics, then semantics as a linguistic project must eschew relational properties like reference, construed as a relation between a linguistic expression and some object. Chomsky holds that, as a technical concept, the concept of reference is ill-conceived and, in so far as we informally use the term 'reference' and its cognates, referring is something that individual speakers do—but linguistic

[224] Chomsky 2000:105
[225] Cf. Baker & Hacker 2005:1-4

expressions do not.[226] He explicitly agrees with Peter Strawson on these matters and writes:

> The question, 'to what does the word X refer?,' has no clear sense, whether posed for Peter, or (more mysteriously) for some "common language." In general, a word, even of the simplest kind, does not pick out an entity of the world, or of our "belief space" […] Something is named as a person, a river, a city, with the complexity of understanding that goes along with these categories. Language has no logically proper names [i.e. names or words that pick out exactly one object without the risk of referential failure; FD], stripped of such properties; one must beware of what Peter Strawson called "the myth of the logically proper name" (Strawson 1952:216) in natural language, and related myths concerning indexicals and pronouns.[227]

There are other salient upshots ensuing from Chomsky's I-language/E-language distinction. One is that it allows him to distinguish between purely technical concepts, which can be employed in a scientific enquiry into what I-language is, and common sense concepts, on which we can draw if engaging in a purely conceptual (or philosophical) investigation. If questions about correct language use belong to the domain of E-languages and not to I-language, they may pose conceptual problems potentially independent of the scientific enquiry that Chomsky is interested in. Consequently, Chomsky is committed to insisting that Kripkenstein's scepticism and the whole rule-following debate do not concern his project.

To defend this, he may argue that the technical vocabulary he deploys to describe the linguistic dispositions he is interested in—viz. 'parametric settings', 'principles', 'rules', and 'representations'—are not meant to introduce mediating elements between the possession of a linguistic disposition and its manifestation in (those aspects of) language use (which they determine). On a superficial reading of Chomsky's texts, the idea that parametric settings, principles, rules or representations belong to the biological endowment could seem incompatible with that denial. But Chomsky's account is not necessarily incompatible with the denial, because claiming that some linguistic dispositions adequately describe the internal relation between possessing a linguistic disposition and those aspects of language use which they determine simply draws on the fact that these dispositions are defining of human nature and do, because of that, not require further grounding in metaphysical profundities. Putting this into a programmatic slogan, we may say that human language takes care of itself. I shall argue below that Chomsky does not always perceive this option clearly and that he sometimes fails to commit himself to it, which leads him to musings which are conceptually unsound.

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[226] Cf. Ludlow 2000:424 and his references to Chomsky 1981 and 1995a. Note that Ludlow's wording could be taken to mean that Chomsky is merely talking about relations between words and objects in the external environment. But the quote from Chomsky inserted below makes perfectly clear that he rejects *any* relation between words and objects.

[227] Chomsky 2000:181

But I shall also make clear that the option just mentioned is nevertheless Chomskian in spirit.

There are influential writings of Chomsky where he does get all this wrong. Initially, Chomsky had tried to argue against Kripkenstein's sceptic that there is indeed a fact of the matter about what the workings of the language faculty operate on. He was, in other words, tempted to reify technical concepts like 'parametric setting', 'rule' or 'representation'.[228] We have seen in section 1.1 of part A that dispositionalism in general does not have the conceptual resources to do that.[229] More recently, Chomsky has changed focus and now opts for a strategy similar to the one I just suggested.[230] He adds, in order to strengthen his case, that the concept of semantically correct language use does belong to the study of E-language anyway. Clarifying semantic correctness is a project supplementary to enquiries into I-language, but has no obvious use for it, because semantically correct language use does not fall within the domain of I-language, i.e. is not fully determined by the language faculty. A language user

> may choose to violate the rules, perhaps using the word "chair" to mean *table* in a code […] [i]n doing so, he makes use of faculties of mind beyond the language faculty.[231]

This is of course very similar to what I have been stressing several times so far: language use is volitional—the ability to use language is exercised at will—and dispositions are sometimes overruled by will, but cannot be said to be exercised. Therefore, intuitions about correct language use in general do not necessarily constrain enquiries into the language faculty. It appears now that much hangs on Chomsky's methodological distinction between I- and E-language, as it apparently allows him to dodge some widely spread worries.

Let us now consider what the faculty of language is in more detail and whether it can explain how linguistic expressions become available for use. For that was our motivation to take up the issue of linguistic competence and reconsider dispositionalism again, after all. Once the more detailed picture is available, further objections against Chomsky's programme can be discussed. In that context, an assessment of the conceptual soundness of Chomsky's methodological perspective—which is to a large part just the distinction between I-language and E-language—will claim centre stage.

It was mentioned that more recent versions of Chomsky's dispositionalism have better chances of passing muster. Therefore, the summary provided by Hauser, Chomsky and Fitch will count as the relevant account of the conceptual framework.[232] Hauser et al. argue that a

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[228] Chomsky 1986:ch. 4
[229] Cf. Wright 1989c/2001:ch. 7 for other reasons.
[230] Chomsky 1993, 1995b and especially 2000:141-3
[231] Chomsky 2000:143
[232] Hauser et al. 2002

full understanding of the language faculty requires substantial cooperations across several academic disciplines. Linguistics, evolutionary biology, psychology, anthropology and neuroscience each play a role. It is therefore necessary to become clearer on what a study of the language faculty—qua study of I-language—amounts to.[233] To that end, Hauser et al. distinguish between a broad and a narrow conception of the language faculty, FLB and FLN respectively. Whereas FLB contains most things necessary and sufficient for human language use, FLN is a computational system which combines words from the lexicon (not part of FLN) in order to produce linguistic expressions ready for use. FLN recursively determines syntactic composition. FLB determines, together with FLN as its functional kernel, sensory-motor functions (like speech) and conceptual-intentional functions (like attending to something), but does not include some other aspects necessary for language like respiration or memory. The reason seems to be that there are many animals which have respiration and memory, but nothing like a language faculty.

Hauser et al. admit that the precise nature of FLB, especially the sensory-motor and the conceptual-intentional functions, is currently subject to debate.[234] They do, however, claim that the workings of FLN are less controversial. FLN takes a finite set of elements—the lexicon—as input and combines the elements into a possibly infinite array of expressions. Those expressions are then passed on to the parts of FLB which determine how the expressions are to be articulated and what concepts they may express. FLB thus makes the expressions obtained from FLN available for language use.[235] It is not clear how expressions are passed from FLN to FLB or what precisely FLB does with them, but it is quite clear that neither FLN, FLB nor the expressions they operate on need be physically identifiable—so it appears best to think of either of them as abstractions or idealisations.[236] The sort of linguistic dispositions associated with the workings of FLN are, on the other hand, relatively well described.

A word about 'possibly infinite array of expressions' might be due here in order to dispel misunderstandings. Talk of a possibly infinite large array results from the recursive characterisation of how linguistic expressions are derived from a lexicon and from the fact that the relevant recursive characterisations do not contain an upper limit, simply because such limits are not determined by the formal properties of the characterisations. Of course, there are biological boundaries to the length of expressions that can be produced (or

[233] Hauser et al. 2002:1570 identify I-language with the language faculty as studied in theoretical linguistics inspired by Chomsky.
[234] Op. cit. pp. 1570-1
[235] Op. cit. p. 1572
[236] Cf. Chomsky 2000: 38/184; the claim is most explicit in Chomsky & McGilvray 2012: ch. 7.

understood), but these boundaries are not a defining mark of FLN; the boundaries may be defining marks of FLB, of further capacities such as memory or even of the anatomy and physiology of articulation. From that point of view, recursive characterisations of grammatically well-formed sentences are just as unproblematic as recursive characterisations of natural numbers. All is well, as long as we do not read into this a commitment to saying that we thereby grasp (each and every element of) a potentially infinite totality or even an actually infinite totality.[237]

It is easy to see how appealing to FLN can explain how linguistic expressions become available for use, once there is a lexicon—a part of FLB—that supplies the relevant words together with constraints on how to combine them. Verbs like 'go' can be combined with pronouns like 'I', 'you' or 'they' by putting the pronoun first and concatenating it with the verb; the lexicon supplies the verb, the pronouns and constraints on how they are to be put together and FLN actually puts them together. The constraints that the lexicon puts on concatenations can also be supposed to provide hypothetical uses of linguistic expressions; they possibly do that together with memories about situations in which language use was falsified or passed muster. The lexicon specifies how the word can be combined with other words and memory specifies possible situations in which the word (alone or combined) can be uttered. FLN thus might take 'I' and 'go' from the lexicon, combines them (in accord with the lexicon) into 'I go' and passes the expression on to FLB where, with the help of memory, it is established that I may utter 'I go' to say that I go. For a restricted set of simple declarative sentences it is possible that something like Evansian dispositions (as specified in T3) are partly responsible for entitling me to utter 'I go' to say that I go when I do. So there might be a disposition specifiable like this:

> For any of the singular personal pronouns 'I' or 'you', the concatenation of a pronoun with the verb 'go' yields a true sentence iff the person denoted by the pronoun satisfies the predicate 'go'.

Such dispositions are—if they exist—part of long-term memory, because they have been learned early during first-language acquisition. And because memory is not necessarily contained within the language faculty, the formation of hypotheses about correct use may prove to lie outside the domain of what Chomsky regards as subject to proper naturalistic enquiry. There may, of course, be rules which govern language use by sanctioning, restricting or adding to what linguistic dispositions provide. It might therefore very well be that rules specify semantically correct (E-)language use much like orthodox Wittgensteinians envisage.

[237] Cf. Hauser et al. 2002:1672

And so it seems that the sort of dispositions that Chomsky takes to be definitive of linguistic competence are indeed available for my Wittgensteinian proposal of correct language use.

Nevertheless, that result is not something most participants in the rule-following debates would have expected, especially not orthodox Wittgensteinians. We should hence pause for a moment and consider some of the fervent attacks on Chomsky coming from that camp.

Baker & Hacker on Chomsky

In their *Language, Sense & Nonsense*, Gordon Baker and P.M.S. Hacker argue that a wide range of received philosophy of language and theoretical linguistics is conceptually confused.[238] This strong claim is partly motivated by considerations familiar from the rule-following debate. Despite the merits their views have, the polemic tone Baker & Hacker have chosen has brought it about that the monograph has not had the influence it should have had. Their main targets, truth-conditional conceptions of meaning and (pernicious) dispositionalist conceptions of linguistic competence, still exist and prosper.

Baker & Hacker devote three entire chapters to a criticism of Chomsky's perspective and its influence on linguistics and the philosophy of language.[239] Their worries are legion, but it will suffice to focus on only a part of them here. First, I shall consider two minor points they make concerning central aspects of Chomsky's programme. Second, I shall take up their attack on Evans's dispositionalism, because they assume that it applies to Chomsky as well. Third, the principal worry that Baker & Hacker raise against Chomsky will be assessed. It will emerge from that discussion that most of their objections do not apply anymore, since Chomsky has explicitly drawn a distinction between I-language (and the technical concepts bound up with it) and E-language (and the common sense concepts bound up with it) in 1986.[240] That will eventually lead to a detailed assessment of Chomsky's methodological considerations which buttress the I-/E-language distinction in the next section; even though that assessment does not follow the letter (or the tone) of Baker & Hacker, it will reintroduce a worry in their spirit.

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[238] Baker & Hacker 1984a

[239] Baker & Hacker 1984a: chs. 7, 8 and 9

[240] It is interesting that Hacker never noticed this, for in Baker & Hacker 2005:365/366 he still criticises papers by Chomsky which are more than 40 years old and, hence, completely outdated. Incidentally, Hattiangadi's cricitism of Chomsky are based on only one work by Chomsky, which was also more than 25 years old when she wrote her 2007. I suspect that this is symptomatic for a curious attitude that many philosophers of language have towards Chomsky's achievements. On the other hand, Chomsky's previous writings had achieved the status of orthodoxy, so it is perhaps legitimate to target them in some cases.

There are two minor points Baker & Hacker raise against Chomsky which directly pertain to what I have said above. A first point criticises the claim that, as they put it, "any language has an infinity of sentences".[241] And a second point rejects Chomsky's claim that the language faculty is similar to a physical organ.[242]

Let us turn to the first point. Baker & Hacker write that, according to Chomskians, any language has an infinite number of sentences. Not only are there infinitely many of them, they can also be infinitely large, as they are derivable by repeatedly embedding any declarative sentence *s* in an opaque context like 'He said that...'. They write:

> These claims rest on the supposition that the rules of grammar and the lexicon, of their own accord, confer meaning on these bizarre objects, even though we, speakers of the language, cannot grasp their meanings through purely 'medical limitations' (as Russell once put it).[243]

'These claims' refers to Chomsky's claim explained above, which has it that the faculty of language is characterised recursively and that there are no (formally specified) upper limits to the derivations it can possibly produce. Baker & Hacker correctly gather that from Chomsky's writings. What is untenable is the semantic supposition they illicitly project into this when they claim that the rules of grammar and the lexicon confer meaning. It is hard to pin down where exactly they derive this claim from, but any supposition along these lines is not in accord with the Chomskian picture.[244] In a recently published interview, Chomsky is explicit about this point and claims that there might be only syntax and language use:

> So why shouldn't the meaning side of language work like that: no semantics at all—that is, no reference relation—just syntactic instructions to the conceptual apparatus which then acts?[245]

The point of this is obvious: the dispositions Chomsky is interested in just build syntactically well-formed sentences and do not at all confer meaning. Backer & Hacker think not only that very large sentences are build by the faculty of language, but that it also 'confers meaning on these bizarre objects' and that it makes them intelligible. And that is obviously wrong.

This is a serious mistake on Baker & Hacker's part, for that aspect of Chomsky's project has been established since the beginning. Already in the introduction of his 1955 manuscript, Chomsky insists on taking syntax, which contains the recursive machinery

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[241] Op. cit. p. 306
[242] Op. cit. p. 280
[243] Op. cit. p. 306
[244] I conjecture that they falsely accuse Chomsky of also endorsing a supposition they found in Katz & Postal 1964 and other proponents of generative semantics. See Ludlow 2011:ch. 1 for an overview of the disagreements between Chomsky and proponents of a generative semantics who actually do endorse what Baker & Hacker mention in the quote.
[245] Chomsky & McGilvray 2012:29

allowing the derivation of a potential infinitude of sentences or very large sentences, as conceptually prior to semantics. And on the picture presently at hand, FLN too is a recursive system which does not at all confer meanings on sentences but may in principle determine the derivation of an inifinitude of sentences or very large sentences. The reason why FLN does not actually produce ludicrously large arrays of sentences is, as has been already argued, that there are constraints on derivation—imposed by FLB or other biological properties of humans—which prevent this.[246] It is true that the recursive characterisations which are defining of FLN do not have formal upper limits for some derivations, but this does not mean that speakers of any language thereby tacitly grasp an infinitude (or any other ludicrously large totality) of linguistic expressions—not to mention their meanings or possible usages.

The upshot is obvious but worth stressing: the recursive properties of FLN are the properties of an abstraction described in computational terms—once we look at other biological constraints on language, the possible infinities generated by the descriptive tools employed does not at all commit theoretical linguists to the claim that language users tacitly grasp an infinitude of sentences.

The second minor point I wanted to mention concerns the statement that language is a mental organ. Chomsky often compares the language faculty, the kernel of our capacity to use any language, to physical organs. This is something that Baker & Hacker find very problematic:

> Having compared a capacity to an organ, he then suggests that one can regard the 'growth of language' (presumably meaning the development of the ability to speak a language) as analogous to the development of a bodily organ. But it is as difficult to regard one's increasing mastery of a language thus as it is to regard an athlete's increasing capacity to run fast as analogous to the growth of a third leg! The final self-inflicted blow comes with the declaration that *language is a mental organ* (whose character is guaranteed by genetic mechanisms).[247]

It is important to note here, that 'capacity' does not mean the same for Chomsky as it does for Baker & Hacker. For Chomsky, 'capacity' is a technical concept referring to a competent language user's dispositions to use the sort of sentences that an account of FLB will predict. The aspects of language use not predicted by any account of FLB—viz. all aspects subject to human volition—are not part of linguistic capacity, if understood in the technical sense. The sort of capacities Baker & Hacker are interested in are, on the other hand, two-way powers (abilities) to use language and only of these can we say that they have organs through which

[246] Cf. Hauser et al. 2002:1672
[247] Baker & Hacker 1984a:280-1

they are exercised. The organs of the two-way powers to use language are the organs of speech production and reception, our hand when used for writing or signing in sign language and our fingertips, which we use when reading braille. These and other organs are the vehicles of E-language use and they are, by extension, organs of human will. But of course, Baker & Hacker are right about this: it is utter nonsense to suppose that I-language is "used" and thus the actualisation of the dispositions constituting I-language does not require anything like the organs of E-language use. I-language, unlike E-language, is not expressed and does therefore not require an organ. So it is indeed misleading when Chomsky talks about a "mental organ".

But the analogy between the development of the language faculty and the development of physical organs does not break down because of this. During language acquisition, FLN governs the development of FLB by constraining the range of possible extrapolations just as the mechanisms of cell-growth constrain (together with the genetic code and the organic materials available) the growth of an organ. Chomsky's hope is to make clear that some central aspects of FLB will develop the same way in all healthy individuals as do most physical organs in the body.[248] Still the claim that the faculty of language does develop much like an organ does not entail that we can speak about it as we speak about any organ. That there is an interesting analogy cannot license speaking of a "mental organ".

With these minor points clarified, we can move on to an issue that concerns both Chomsky and Evans. We have already noted that both have a similar conception of what linguistic dispositions are and Baker & Hacker attack that common ground through a criticism of Evans's position.[249] So, Baker & Hacker agree with Evans that knowledge of a language cannot be a propositional attitude-state when they write that 'learning a language is not akin to learning a corpus of fact and theory'.[250] But they neglect that Evans's dispositionalism does not necessarily require posing mediating elements between understanding a linguistic expression and using it. Recall, the set of truth-conditions that T1 and T2 produce can be taken to provide valid descriptions of the innocuous sort of dispositions, because they simply express the internal relations between 9 propositions (Fj, Fh, Fg, Tj, Th, Tg, Ej, Ea and Eg) and what makes them true. Furthermore, while a dispositionalist account can adduce other factors such as mental or neurological states, these may be regarded as being correlated with dispositions and not as being constitutive of them.

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[248] Put more generally, Chomsky hopes for a unification of theoretical linguistics with biology, chemistry and physics. I devote a section on a more thorough assessment of this hope below. What I say here does, however, already capture the essential point of what I have to say about this.
[249] Cf. op. cit. p. 294 ff.
[250] Op. cit. p. 276

Chomsky has the same strategy available as Evans and he could also insist that his dispositional account is innocuous. This is, however, something that Baker & Hacker do not see, because they assume that explaining a disposition does necessarily require postulating mediating elements between the disposition and what is a manifestation of it:

> The aim of explaining internal relations by inventing (or discovering?) shared intermediate entities is coeval with philosophy itself. It has yielded many noteworthy products, ranging from Plato's theory of forms to Chomsky's deep structures (and innate capacities). But this fact does not justify the strategy. On the contrary, the postulation of intermediate entities is gratuitous. It stems from a misguided attempt to *explain* matters which are already perspicuous, to provide some sort of metaphysical support for what is already self-supporting. And in doing so, philosophers and linguists generate confusions or unclarities.[251]

It should be clear that Evans and Chomsky can, pace Baker & Hacker, make sense of internal relations and retain their dispositionalism if they reject mediating elements as constitutive of the relation between a disposition and what is a manifestation of it. Furthermore, Chomsky can (and sometimes does) admit that internal relations govern correct language use and that that is, by and large, a fact about E-languages.[252] In other words, the idea that internal relations are required to explain E-language use need not be foreign to a Chomskian. But FLN simply governs those parts of language use related to word order and nothing else. Even FLB does not fully determine correct E-language use and is, hence, also not meant to explain all internal relations determining correct language use. It is therefore hard to conceive of Chomsky or Evans as the best targets for the sort of Wittgensteinian worry Baker & Hacker bring up.

With these rejoinders in place, Baker & Hacker's central objection can be assessed. Note that Chomsky can fend off most worries mentioned so far by insisting on his methodological distinction between I- and E- languages. The distinction is also the best basis for a reply to Baker & Hacker's central objection.

Baker & Hacker's central objection builds on two claims: (i) Chomsky's conception of rules is not the common sense conception of rules; (ii) Chomsky should adopt the common sense conception of rules.[253] They argue that Chomsky's project is deeply flawed, because his conception of rules is wrong and requires revision on five counts:

1) *No action at a distance*: The rules of language have a normative function, but

[251] Op. cit. p. 117
[252] E.g. Chomsky 2000:143
[253] I here summarise Baker & Hacker 1984a:312-4, the quotes interspersed below are also from these sections.

Chomsky's rules cannot fulfil this function, because they are 'far beyond the level of potential consciousness'. 'Hence to look for such hidden rules, as a scientist looks for hypothetical entities, is as senseless as looking for unowned sense data on the Costa del Sol'.

2) *No theories*: It is because rules have a normative function that 'no system of rules could be a theory about anything'. Rules do not specify what is done—they do not provide a theory—but rules specify what is to be done, i.e. what one should do to use a language or play chess.
3) *No scientific discoveries*: It is not a sensible project for empirical sciences to discover the rules of language. If one wants to know the rules, one can ask the practitioners engaged in the normative conduct. 'For conduct to be normative, the agents must view their own behaviour under the aspect of normativity, describe their own actions in terms which they themselves explain by reference to particular rules, and criticize and correct their own and other's behaviour in terms of these rules'.
4) *No invention*: Because practitioners must view their conduct as governed by rules—and consciously bring their explanations and their deeds in accord with them—inventing some rules which coincide with their behaviour would not necessarily guarantee that those will be the rules they follow. Baker & Hacker write: 'Were we to invent a set of rules the applications of which coincide with the normative activities of rule-followers, or even with what they merely *say* would be *correct*, it in no way follows that they are following the set of rules we concocted'.
5) *No prediction*: A grammatical theory, being a 'calculus of rules', merely entails what linguistic expressions are syntactically licit, it does not make predictions about what average speakers accept or reject as syntactically licit.

Objections 1-5 obviously confuse the E-language rules that Baker & Hacker are interested in with the I-language rules that interest Chomsky. I-language rules are very different from what Baker & Hacker envisage, but that is perfectly understandable, for the writings they refer to do not yet employ this distinction. In earlier writings, Chomsky often drew a distinction between competence (the linguistic capacity) and performance (actual language use in concrete situation), which did not make clear that there are two distinct sorts of rules.[254]

Nowadays—with a distinction between E-language rules and I-language rules

[254] Cf. the influential introduction to Chomsky 1965, especially p.4.

available—the objections do not hit a target anymore, because the "rules" Chomsky refers to are merely part of the technical vocabulary used to describe some linguistic dispositions and not at all like the rules Baker & Hacker perceive in rule-governed communal practices. Chomsky now is the first to admit that these rules do not govern I-language, because I-language rules are not normative like

> arithmetical or traffic rules, or those given in grammar books, or others with a normative character. A crucial feature of rule-following, then, is that error must be possible in the sense of violation of the norm. Whatever the interest of this discussion, it is not to the point here.[255]

Chomsky focuses on some very specific human linguistic dispositions (which govern word order, transformations of word order, how word order affects intonation patters etc.), because they appear to be systematic enough to be isolated and idealised in a formal system—and it is only within the idealised formal system that we find the sort of rules that Chomsky is interested in. Baker & Hacker are interested in the full scope of human linguistic behaviour and they do, therefore, talk about something that both they and Chomsky do not find a suitable object for empirical enquiry.[256]

This is not simply an old hat. Even recent papers from the Wittgensteinian camp neglect these points. McNally & McNally (2012), for example, fail to notice the distinction between rules governing I-language and rules governing E-language; they hence also fail to notice the consequences of this distinction—even though the writings McNally & McNally consider refer to the crucial distinctions.

In order to make clear how little some people understand the kind of rules governing FLN (and presumably large parts of FLB), a more precise definition of the notion of rules at play in Chomsky's works is due. Chomsky has always had an algebraic conception of grammar. In that technical sense, a standard grammar is a system consisting of just one axiom and rules of inference which generate grammatically well-formed sentences as theorems. The single axiom specifies the initial symbol, which is the original string on which the rules operate. The rules all have the form $\psi \rightarrow \omega$, where ψ and ω either are the original string or strings derived thereof. These rules have a very specific technical interpretation:

> Whenever ψ occurs as a substring of any given string, that occurrence may be replaced by ω to yield a new string. Thus if a grammar contained the rule $AB \rightarrow CDA$, we could derive from the string *EBABCC* the string *EBCDACC*.[257]

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[255] Chomsky 2000:98

[256] Chomsky often claims that language as a social practice cannot be studied along the lines he proposes; see, for example, op. cit. p. 50.

[257] These canonical definitions are from Partee et al. 1990:437

Furthermore, strings can be formed from two alphabets—the terminal alphabet and the non-terminal alphabet—the first can be used to form the sort of strings we want to derive and the second contains strings used during certain steps of the derivation, but which do not show up at the end of the derivation (i.e. in the terminal string).

It is important to note that generative grammars have a formal property not found in standard grammars: whereas in standard grammars only terminal strings are derived, generative grammars will always produce strings with terminal and non-terminal elements.[258] To see why, consider that FLN produces strings which FLB will take up and make available for conceptual-intentional and sensory-motor functions. The Chomskian claim that FLN is the kernel of FLB can be made precise by saying that the non-terminal elements in any string that FLN produces put constraints on how FLB-functions can further process them. This accounts for the phonological fact that, for example, declarative sentences have different intonation patterns than questions and that intonation patterns vary with the syntax of uttered sentence.

The definitions of terminal and non-terminal alphabets are important to understand the technical notion of a Chomsky hierarchy, a formal characterisation of four types of rules which are employed in grammars:

> Use lower-case Greek letters (α, β, γ, δ, ε, …, φ, χ, ψ, ω) for arbitrary strings drawing on both alphabets, upper-case Latin letters for non-terminal strings, and '*x*' as a string of terminal symbols.
>
> Type 0: each rule is of the form $\psi \rightarrow \omega$
>
> Type 1: each rule is of the form $\alpha A \beta \rightarrow \alpha \psi \beta$, where ψ is not an empty string
>
> Type 2: each rule is of the form $A \rightarrow \psi$
>
> Type 3: each rule is of the form $A \rightarrow xB$ or $A \rightarrow x$ [259]

A level of representation is defined by the rules that produced a specific set of string and the rules that may be applied to it. Thus, each type of rule may be regarded as defining a level of representation. An algebraic conception of grammar does, hence, make use of the words 'rule' and 'representation' but not in any sense related to what Baker & Hacker associate with them.[260] These terms do not refer to hidden forms of language use that analysis must discover, but they express—first and foremost—precisely defined technical concepts in order to make available a description of grammatical well-formedness. As it stands, an algebraic conception of grammar is simply a way of describing symbolic transformations. And if descriptions of symbolic transformations in these terms prove successful and reliable, one may presume that they do actually account for how linguistic dispositions governing word-order work. I do

[258] Cf. Ludlow 2011:3-4
[259] The definitions are from Partee et al. 1990:451
[260] E.g. Baker & Hacker 1984a:318, compare also Ludlow 2011:3 on this.

admit, for reasons that I shall discuss in the next section, that there are philosophical pitfalls bound up with a careless reading of what 'account for' means in that context. But this must not amount to denying either that there is an innocuous conception of linguistic disposition or that some linguistic dispositions can be adequately described in terms of the algebraic conception of grammar.

Nevertheless, Baker & Hacker did get the direction of their thrust right. It is true that Chomsky, for example in his initial reaction to Kripkenstein's sceptic, has sometimes argued that rules and representations in the technical sense should be reified.[261] And that does mean that these rules and the different levels of representations are actual parts of minds or brains. It is not obvious that more recent statements concerning this are necessarily wedded to such pernicious reifications.[262] What seems plausible, at any rate, is that a Chomskian dispositionalism can do without.

In order to come up with a Chomskian dispositionalism which can meet the requirements demanded in the present context and still make use of an algebraic conception of grammar, we need to take a closer look at the I-/E-language distinction. More precisely, we must assess the methodological considerations Chomsky adduces to buttress it. Baker & Hacker do express much suspicion about the entire Chomskian project, but it is not possible to find convincing arguments against the contemporary manifestation of Chomsky's project in their work.

Methodological Naturalism and Internalism[263]

As the story was told so far, Chomsky seems to be only interested in what he conceives of as proper linguistics. That picture is, however, misleading. Chomsky certainly is interested in the philosophical issues in play here. Ever since the publication of his monograph *Cartesian Linguistics* in 1966, he has been eager to show that his vision of psychology in general and theoretical linguistics in particular is philosophically sound. The claim has been opposed from various sides and Chomsky has, together with his followers, made many efforts to defend his methodology in psychology and theoretical linguistics. We have seen that, from a Chomskian perspective, the most important goal is to safeguard the I-/E-language distinction from philosophical nagging. The present section assesses whether Chomskians can reach their goal.

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[261] Chomsky 1986:ch. 4

[262] Cf. Chomsky 1993, 1995b and 2000:141-3.

[263] An earlier version of the three following section has been published as Demont 2012. I do, however, express a change of heart in what follows below. I now think––contrary to what I said in the 2012 article––that an all-out rejection of internalism is too crude.

The section begins by considering Chomsky's views on methodology and subjects it to a conceptual challenge. The conceptual challenge comes from Bennett & Hacker (2003) and was initially raised, under the label 'mereological fallacy', to counter conceptual confusion in neuroscience. It had, however, been anticipated in a more general form by Anthony Kenny and Ludwig Wittgenstein.[264] Any version of the challenge can be readily adapted to serve present purposes, but Bennett's & Hacker's appears particularly suitable for challenging Chomsky. The upshot from what follows below is this: whereas Chomsky's methodological naturalism will be found to be sound, his doctrine of internalism will be shown to be pernicious.

Chomsky's Methodological Naturalism

In his paper 'Language and Nature', Noam Chomsky starts the discussion by announcing how he uses the terms 'mind' and 'mental':

> I will be using the terms 'mind' and 'mental' here with no metaphysical import. Thus I understand 'mental' to be on a par with 'chemical', 'optical', or 'electrical'. Certain phenomena, events, processes and states are informally called 'chemical' etc., but no metaphysical divide is suggested thereby. The terms are used to select certain aspects of the world as a focus of inquiry. We do not seek to determine the true *criterion of the chemical,* or the *mark of the electrical,* or the *boundaries of the optical.* I will use 'mental' the same way, with something like ordinary coverage, but no deeper implications. By 'mind' I just mean the mental aspects of the world, with no more interest in sharpening the boundaries or finding a criterion than in other cases.[265]

He then goes on to claim the same about the terms 'language' and 'linguistic'. This point of view eschews a particular methodological dualism for scientific enquiries, which demands that mental and linguistic properties should be studied by employing methods not germane to the natural sciences. It thus holds that mental and linguistic properties, as far as they can be studied by science, are on a par with chemical, optical or electrical properties. The terms 'mental' and 'linguistic' are hence also 'used to select certain aspects of the world as a focus of inquiry'. It is clear from this what Chomsky's naturalism amounts to. He defines 'methodological naturalism' as excluding a methodological dualism which attempts—as a matter of principle—to study language and mind in ways which differ from how natural objects are studied.[266]

Note that Chomsky admits that there are human mental and linguistic properties which

[264] Cf. Kenny 1984: 125-36 and Wittgenstein PI §§281-4 and §§ 357-61.
[265] Chomsky 1995b:1
[266] Op. cit. p. 28

are not part of the world as it is scrutinised by the sciences:

> The concept *human being* is part of our common-sense understanding, with properties of individuation, psychic persistence, and so on, reflecting particular human concerns, attitudes, and perspectives. The same is true of *language speaking*. Apart from improbable accident, such concepts will not fall within explanatory theories of the naturalistic variety; not just now, but ever. This is not because of cultural or even intrinsically human limitations (though they surely exist), but because of their nature. We may have a good deal to say about people, so conceived; even low-level accounts that provide weak explanation. But such accounts cannot be integrated into the natural sciences alongside of explanatory models for hydrogen atoms, cells, or other entities that we posit in seeking a coherent and intelligible explanatory model of the naturalistic variety.[267]

So, common sense concepts applied in ordinary discourse are possibly not relevant to a naturalisitic enquiry, because the mental and linguistic properties which can be scrutinised by the sciences need not be related in any interesting sense to what we commonly talk about. The upshot is that ordinary language is too imprecise to capture the reality that naturalistic enquiries are scrutinizing:

> It is not that ordinary discourse fails to talk about the world, or that the particulars it describes do not exist, or that the accounts are too imprecise. Rather, the categories used and principles invoked need not have even loose counterparts in naturalistic inquiry.[268]

Based on these two ideas—that only limited domains of language and mind can be studied scientifically and that common sense concepts are possibly not relevant for such studies—Chomsky distinguishes philosophical from empirical enquiries:

> In the study of other aspects of the world, we are satisfied with "best theory" arguments, and there is no privileged category of evidence that provides criteria for theoretical constructions. In the study of language and mind, naturalistic theory does not suffice: we must seek "philosophical explanations," delimit inquiry in terms of some imposed evidence selected by the philosopher, and rely on notions such as "access in principle" that have no place in naturalistic inquiry. Whatever all this means, there is a demand beyond naturalism, a form of dualism that remains to be explained and justified.[269]

This and similar passages throughout Chomsky's recent works suggest, and are usually read as suggesting, a strict divide between purely conceptual philosophical enquiries on the one hand and empirical enquiries as conducted in natural sciences on the other.[270] It also suggests that he uses the terms 'mental' and 'linguistic' in a way that associates them with such

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[267] Chomsky 2000: 20
[268] Op. cit. p. 33
[269] Chomsky 2000:142
[270] Cf. Stainton 2006 and Chomsky 2000:20-4 and 37-45.

empirical enquiries.

Incidentally, Chomsky does think that traditional conceptions of philosophy did not entail a sharp distinction between philosophy and natural science.[271] Peter Hacker finds that surprising, because it seems not to go together well with Chomsky's distinction between analytic truths—the domain of purely conceptual philosophical enquiries—and empirical truths—the domain of empirical enquiries as conducted in natural sciences.[272] The solution to this is that Chomsky and Hacker disagree on what traditional philosophy was after. For Hacker, they were after analytic truths and for Chomsky, they were after the fundamental and often hidden causes and principles. Chomsky thinks that such philosophical goals can also be attained by discovering empirical truths—and then we will not have to engage in mapping out analytical truths anymore. Hacker thinks that philosophical goals cannot be attained by discovering any empirical truth—for him, only clear maps of analytic truths will do, provided they can dispel conceptual confusion. I shall eventually argue that Chomsky's view on philosophical goals and empirical truths is not exactly the one we should adopt, but a few other issues have to be clarified before we get there.

Let us return to the elements of Chomsky's naturalism. It is because the terms 'mental' and 'linguistic' (as employed in empirical enquiries) select certain aspects of the world that a scientific enquiry into mental and linguistic properties will produce theories which explain the phenomena rather than merely describe them. And those theories are expected to be in principle unifiable with the theories of the hard sciences, viz. physics, chemistry or biology. Chomsky is cautious not to demand that the former theories be reducible to the latter; he merely claims that one can hope for an eventual unification of the theories. He takes this to be a lesson to be learned from the history of science:

> There is, I think, a good deal to learn from the history of the sciences since they abandoned common sense foundations, always with some uneasiness about just what they were doing. We should by now be able to accept that we can do no more than seek "best theories", with no independent standard for evaluation apart from contribution to understanding, and hope for unification but with no advance doctrine about how, or whether, it can be achieved.[273]

Chomsky does, however, add an important caveat by admitting that the empirical grounds for a unification have not been established so far:

> The current situation is that we have good and improving theories of some aspects of language and mind, but only rudimentary ideas about the relation of any of this to the

[271] Cf. Chomsky 2000:141
[272] Hacker 1990:127
[273] Chomsky 1995b:7

brain.[274]

The hope for unification of theoretical linguistics with the hard sciences makes sense if one accepts Chomsky's methodological naturalism. After all, if several disciplines study the natural order of things by applying the same methods and principles, one may indeed hope that the resulting picture of the natural order of things will be consistent. It will be argued below, however, that the hope for unification does inform Chomsky's conception of how one ought to study linguistic and mental properties in a way that is illicit for purely philosophical reasons. It is therefore important to emphasise that there are no empirical grounds suggesting a possible unification.

Another idea which plays a role in Chomsky's methodological naturalism is that producing theories which do explain phenomena involves advancing 'the search into deeper principles'.[275] At the very least, this must mean that theories are expected to allow for predictions and that, therefore, we should appeal to certain principles which enable making predictions. But what sort of predictions are we after here? We must distinguish between theories which merely describe the relevant phenomena (viz. linguistic dispositions governing word-order, intonation patters etc.) and those which also explain first language acquisition, i.e. theories which are simple and basic enough to explain how the relevant linguistic phenomena can be acquired. It is the second sort of theory that Chomsky is after.

That 'principles' means 'algebraic principles' also appears to be a justified conjecture by now. We have seen in the section on Baker's & Hacker's attacks on Chomsky that the sort of grammar Chomsky is after is characterised algebraically and the only principles that such a grammar makes feasible are, of course, algebraic principles. It is, however, hard to pin down exactly what 'deep' in 'deeper principles' can sensibly mean for Chomsky, especially if we want to know how he takes algebraic principles to explain first language acquisition. But at the end of these sections we shall be in a position to see what it must not mean in order to ensure the conceptual soundness of methodological naturalism. Nevertheless, the gist of the enquiry in theoretical linguistics clearly is to come up with some general principles by abstraction and to come up with an algebraic description of grammar as defined above.[276] Whether these principles are "deep" enough to suggest a unification of theoretical linguistics with the hard sciences will be the bone of contention between Chomsky and me.

What are the grounds for a disagreement with Chomsky on this? What will be questioned below is whether grasp of such principles can be attributed to minds or brains—

[274] Chomsky 2000:116
[275] Chomsky 1993:41
[276] Chomsky 2000:122

and can be called 'deeper principles' in that specific sense, because they are a crucial step towards what Chomsky envisages as a unification with the hard sciences. Remember that the principles governing computation could alternatively be thought of being deep in the sense that they enable making predictions about some strikingly systematic aspects of first language acquisition. On that alternative reading, such principles would be certainly deeper than merely descriptive principles which do not warrant predictions, but they would count neither as an insight into a previously hidden reality nor as an insight into how theoretical linguistics could be aligned with the hard sciences. The alternative proposal will, as far as the practice of theoretical linguistics is concerned, boil down to the requirement that we seek algebraic conceptions of grammar and that those grammars shed light on at least some puzzling facts about first language acquisition. Achieving that is tricky enough and we will have done well if we can achieve it.

In summary, Chomsky's methodological naturalism, which is also meant to capture the principal aspects of enquiries into physical, chemical and biological phenomena, comprises the following points:

- the objects of scientific enquiry are natural phenomena
- the goal is not merely description (systematic taxonomies are not enough)
- explanations involve positing deeper principles of some sort
- there is a strict divide between analytic and empirical truths, but both can in principle answer philosophical questions

It is useful in this context to distinguish, as Chomsky himself does, an internalist from a naturalistic methodology:

> I want to distinguish an *internalist* from a *naturalistic* approach. By the latter I mean just the attempt to study humans as we do anything else in the world. Internalist naturalistic inquiry seeks to understand the internal states of an organism. Naturalistic study is of course not limited to such bounds […] Internalist studies are commonly presupposed in others with broader range, but it should be obvious that the legitimacy of one or another kind of inquiry does not arise.[277]

So, when it comes to psychology and theoretical linguistics, the methodology that Chomsky applies and defends is both naturalistic and internalist. That is to say that his methodological naturalism is to be supplemented by a further principle for those disciplines:

- mental and linguistic properties are to be explained through the internal states of organisms

The proper explanation of mental and linguistic phenomena, according to an internalist

[277] Chomsky 2000:134

methodology, is to be given in terms of internal states of organisms. And as the relevant principles to be discovered govern computations—at last in theoretical linguistics à la Chomsky—the relevant internal states would be computational states. Chomskian internalism thus ascribes such computational states to organisms. It is important to bear in mind that internal states are contrasted with relational states. The distinction, as it will be argued below, is not necessarily one between states describable in terms of properties of brains versus states describable in terms of how a person behaves. One might—and people usually do—bring the second distinction in and associate internalism with it, but they do usually not provide reasons for employing the stronger conception of internalism.

Notice that the internalist principle applies to linguistic and mental properties only and not to other properties (viz. electrical or chemical) that Chomsky finds fit for a naturalist enquiry. Now, the decision to adopt the internalist principle must not be based on *apriori* demands on empirical enquiry. Chomsky's internalism can hence not be the outcome of a purely conceptual enquiry even though he has produced extensive philosophical arguments for it.[278] So, it must not be an analytic truth that a naturalistic approach to the mental and linguistic properties that interest Chomsky should be restricted to ascribing computational states (i.e. internal states) to organisms. But is it an empirical truth that a study of mental and linguistic properties should involve ascribing computational states to organisms?

Internalism might indeed be based on empirical data which has been gathered and which was interpreted in accord with the standards set by methodological naturalism. But if the interpretation turns out to be flawed or if enough empirical findings to the contrary were available, Chomsky would then have to give up internalism. An alternative option would be to claim that the internalist principle is an analytic truth and that would be an *apriori* demand for treating linguistic and mental properties differently from electrical or chemical properties. This alternative option would, of course, also exclude Chomskian research programmes from the respectable circle of research programmes in accord with methodological naturalism, because it introduces again the sort of methodological dualism that is inconsistent with it. Hence, if internalism is true, it is so by virtue of empirical fact.

In what follows I shall not consider empirical evidence for or against internalism.[279] I shall mainly focus on whether internalism, as Chomsky conceives of it, is consistent with other claims he makes. Most important in that respect will be claims about what counts as an explanation if one adopts methodological naturalism. There are *prima facie* two questions we may raise concerning internalism:

[278] Cf. Bezuidenhout 2006
[279] Cowie 2008 (especially section 2) introduces and discusses evidence for and against internalism.

1) Is internalism consistent with methodological naturalism?
2) Does internalism fully explain linguistic and mental properties in terms of internal states of organisms?

The second question is easy to answer. The sort of properties that Chomsky will allow as the proper objects of a naturalistic enquiry are those which can be accounted for along the lines he envisages. So it may turn out that some properties cannot be explained, even though it seemed so at the beginning, and then these properties will not count as proper objects of enquiry anymore. A general answer to the second question is therefore easy to give: yes, internalism fully explains linguistic and mental properties. But that answer does not allow us to determine whether Chomsky's approach in psychology and theoretical linguistics makes sense or not, because the internalist presumption determines both what counts as an explanation and what counts as a suitable property for enquiry. It is thus much more fruitful to turn to the first question if one wants to find out whether Chomsky's approach makes sense at all.

The first question demands more work than the second question. The main problem is to decide whether the search for deeper principles, as methodological naturalism envisages them, does require an internalist perspective. If it does, internalism becomes an integral part of the conceptual foundation of naturalist enquiries into linguistic and mental properties—and is rendered vulnerable to the objections that Chomsky himself directs at methodological dualism. If the search for deeper principles does not straightaway require internalism, the picture changes somewhat. We must then ask whether empirical findings can in principle warrant internalism and whether, as a second step, suitable findings could warrant the revision of our concepts in such a way as to make internalism mandatory for the study of those mental and linguistic properties which can sensibly be studied in a naturalistic way.

It is hence important to examine more closely how Chomsky draws the line between his naturalism and his internalism. Clarifying what 'deeper principles' can amount to means asking whether methodological naturalism and internalism are related: does the search for deeper principles in psychology and linguistics sensibly involve attributing computational states to organisms?

Chomsky and the Mereological Fallacy

Chomsky's internalism has it that mental and linguistic properties are to be explained via the internal states of organisms. Furthermore, these states are thought to be computational states

and they are thought to describe deep principles of some sort. Note that these deep principles are assumed to be accounted for by ascribing computational states to organisms. Mental and linguistic properties must be explained along these lines if they can be explained scientifically at all. This is the general tenor in Chomsky's work and it is also how commentators perceive the issue.[280]

But in everyday life, other explanations of mental properties prevail. We commonly say things like 'John knows Spanish', 'Jessica wants more cake', 'Sarah means "addition" by "plus"' or 'Jermaine believes that the microphone is on'. We do not adduce any internal states of organisms to talk about mental and linguistic properties. Chomsky, on the contrary, explicitly holds that 'mind and language properties are properties of brains'.[281] That is not a new idea of his, Chomsky has frequently claimed that linguistic properties are mental properties and that one can expect them to be realised in the brain.[282] So, what he suggests is to explain linguistic and mental properties through ascribing computational states to the brain. Notice that internalism requires that the states be ascribed to organisms—the bodies of persons—and that Chomsky adds to this that the states be ascribed to brains. Now it appears that explaining the properties Chomsky is interested in also requires attributing computational states to an organ of persons: the brain.

Bennett & Hacker have objected to contemporary neuroscientists (and some associated philosophers) that they commit a mereological fallacy by ascribing properties to the parts of something which can only be ascribed to the whole.[283] More specifically, the objection is that mental properties can only be predicated of persons and not of parts or organs of persons, such as brains. People can be said to have mental properties and brains cannot, in any sense, be said to have mental properties. That is so, because brains are merely parts of persons and there is no good reason why neuroscientists should break with common parlance.

This flatly contradicts Chomsky's internalism. What options does Chomsky have to defend himself? Recall that internalism must be motivated by empirical findings and not by analytic truths, because the latter entails a methodological dualism Chomsky is averse to. But if Bennett & Hacker are right, alleged empirical findings must be responsive to conceptual scrutiny, since conceptual scrutiny determines the topic of empirical enquiries. Internalism can then not be defended on empirical grounds either, because an empirical enquiry cannot be based on the mereological fallacy that linguistic or mental properties can be ascribed to

[280] Cf. Chomsky 2000:ch. 6 and Bezuidenhout 2006
[281] Chomsky 1995b:11
[282] Cf. Chomsky 1965 and consider the due objections in Baker &Hacker 1984a: chs. 8.4/8.5 and Wright 1989c/2001:ch.7.
[283] Cf. Bennett & Hacker 2003:ch.3

brains.

In part 1 of their book, Bennett & Hacker show how the choice of methodology and the way how empirical findings are interpreted require preceding conceptual enquiries. This is a view Chomsky is also committed to, because his distinction between empirical enquiries and conceptual enquiries is itself the result of a conceptual enquiry which draws heavily on the history of science. Chomsky speaks of the canons of methodological naturalism (which can be observed or violated) and takes those canons to be the mark of theoretical understanding, a 'particular mode of comprehension'.[284] Furthermore, the methodological naturalism he envisages is a mark of rationality and the propositions defining naturalism are truisms—and such truisms appear rather similar to what Hacker would call an analytic truth.[285] Bennett & Hacker's objection from mereological fallacy is argued for through two strictly conceptual considerations which should count as admissible from Chomsky's point of view:

(i) scientific enquiries into the properties of brains need not identify them with mental properties

(ii) scientific enquiries should eschew philosophical commitments which they do not need

These considerations are applied to actual cases. Bennett & Hacker show in detail how commitments to Cartesianism informed the methods of the forefathers of modern neuro-sciences. They show how philosophical commitments, which were neither directly prompted by empirical findings nor needed as a conceptual basis for their methods, bedevilled the interpretation of neuro-scientists' work and created a set of problems which were often simply taken up by later generations without any further conceptual scrutiny.[286] Bennett & Hacker's considerations are important here, because we must raise the question whether similar philosophical commitments bedevil theoretical linguistics through Chomsky's notion of internalism.

Based on their observations, Bennett & Hacker emphasise the distinction between conceptual and empirical enquiries, but, at the same time, uphold the claim that questions concerning appropriate topics of empirical enquiry are—by and large—conceptual questions:

> [T]he *only* ways in which a conceptual investigation can assist an empirical subject are by identifying conceptual error (if it obtains) and by providing a map that will help prevent empirical researchers from wandering off the high roads of sense.[287]

The claim is this: philosophy can decide whether a topic of empirical research makes sense.

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[284] Cf. Chomsky 2000:77
[285] Textual evidence for this abounds, but Chomsky 2000:49-50 is particularly clear.
[286] Cf. Bennett & Hacker 2003:ch. 2
[287] Op. cit. p. 7

But Baker & Hacker do also claim that empirical findings cannot solve philosophical problems.[288] It is this second claim with which Chomsky would disagree, because he holds that empirical findings can answer at least some philosophical questions. But can this allow him to overcome the objection that he commits a mereological fallacy?

First, observe that there is nothing in the objection from mereological fallacy which runs counter to methodological naturalism as such. Actually, naturalism does require that no mereological fallacies be committed. If you want to explain a higher level property A naturalistically you may try to do that by invoking deeper principles which only concern the lower level properties of parts of A, but not A itself. A problem appears, if one ascribes properties, which only A as a whole can have, to the parts of A. Explaining the chemical properties of iron involves invoking general principles governing electron distribution in iron atoms. But speaking of the electrons of iron as having the chemical properties normally predicated of iron would be nonsense.

Something similar is true of the physical properties of iron. We explain the difference between a cool piece of iron and an incandescent piece of iron by saying that photons are emitted when electrons switch to a lower energy level and that in a cool piece of iron no photons are emitted, because the electrons are at their lowest possible energy levels. Again, if we ascribe the physical property to be explained (i.e. incandescence) to the electrons, we have produced nonsense. So, methodological naturalism itself requires that no mereological fallacies be committed. But it still makes good sense that chemical and physical properties of atoms, for example, are explained in terms of the properties of the parts of these atoms. So, there is at least one sense of 'internal' which is innocuous, because it is actually required for naturalistic explanations of some chemical and physical properties.

Applied to Chomskian linguistics, one must not be mislead by hopes for a unification with the hard sciences. If the hope for such a unification leads one to ascribe mental or linguistic properties to brains, one will have produced nonsense just as much as if one attributes chemical properties, which naturally belong to atoms, to electrons. So, if internalism is motivated by hopes for unification along these lines, it is clearly ill-conceived.

Reconsidering the explanations of chemical and physical properties of iron just mentioned, one might want to revise the notion of internalism to allow for an analogous treatment of mental and linguistic properties. One should then hold that explaining linguistic dispositions of persons through the deeper principles of grammar must not only concern parts of organisms (viz. brains) or of persons (viz. minds), but must also mention whole organisms

[288] Cf. Bennett & Hacker 2003:373 and Hacker 1990

or persons in order to count as an explanation at all. Given that we cannot study persons naturalistically (as Chomsky admits), we must focus on organisms. And here we find that Chomsky violates a sensible conception of empirical enquiry even if we stretch the concept of an organism on the Procrustean bed of scientific idealisation and abstraction and allow organisms to have linguistic dispositions: Chomsky does not relate the deeper principles of grammar, which allegedly provide very abstract descriptions of properties of the brain, to any organisms which have linguistic dispositions.[289] So, the principles are identified computationally rather than neurophysiologically after all. This has important consequences for Chomsky's internalism and for how we should construe the notion of a deeper principle.

The search for deeper principles is part and parcel of methodological naturalism. The principles governing computation are deeper than purely descriptive principles, because they enable predictions and explain some aspects of first language acquisition. And that is all. No hope for unification may dictate what counts as 'deeper'. The objection from mereological fallacy severs the bonds between methodological naturalism and Chomsky's original conception of internalism at precisely this point: the search for deeper principles must not require ascribing computational properties to parts of an organism if the principles do not also refer to the organism as a whole. This establishes that if the search for deeper principles involves an *a priori* hope for unification with the hard sciences and if it is precisely this hope which leads to nonsense, then the notion of deeper principles must be revised so as not to entail such a hope.

A revised conception of deeper principles will also entail a revised conception of internalism, because explanation will not come forth from simply ascribing mental properties to parts of organisms. So, a revised conception of internalism would only be admissible if the following two conditions are fulfilled: 1) if it involved ascribing computational states to parts of organisms and made sufficiently clear how these parts relate to the whole organism or 2) if it involved ascribing computational states to parts of persons and made sufficiently clear how these parts relate to the whole person. Option 2 does not work because it is hard to see what a suitable part of a person would be and Chomsky also declares that persons and their behaviour are not something he considers a suitable subject of an empirical enquiry. Option 1 does only work if abstraction licenses speaking of organisms as bearers of linguistic dispositions and if it can be made sufficiently clear how the brain is related to the whole organism. One must then ask why parts of organisms should be capable of performing the computational tasks that parts of persons cannot. And the Chomskian reply to this is, of

[289] Cf. Chomsky 2000:116 where he admits that there is no empirical basis for such a relation.

course, that it is hard to see what could count as a part of a person and that the concept of a person (and her behaviour) is not suitable for naturalistic enquiry—even though the concept allows us to answer some questions outside of science.

But why should one distinguish these two options anyway? After all, the argument from mereological fallacy does not directly show that mental properties cannot be reduced to brain properties. It merely shows that we must not ascribe properties to parts of things which can only be ascribed to things as unities. It makes sense to say that persons have brains and if we could explain how ascriptions of computational states to brains do help explaining the linguistic dispositions of persons, everything would be fine.

One must respond to this that a reduction of mental properties to brain properties—which Chomsky ultimately hopes for—cannot automatically yield better explanations. And one might wonder whether it will provide any explanation at all. Illustrative cases abound. Research has shown that brain activities associated with intentions to act precede the subject's thought that they are consciously intending an action.[290] If mental properties are reduced to brain properties, we still need criteria to distinguish those brain activities, which are associated with conscious intentions, from the other brain activities associated with intentions to act. More specifically, we need to determine precisely the onset of the conscious intention to act in order to be in a position to say to which brain properties the mental properties have been reduced to. Once we can determine this, everything will be fine, but Chomsky admits himself that there are no empirical grounds for assuming that we can.

Is there reason to hope that we will ever be able to achieve a reduction in linguistics? I do not see any. Concerning the syntactic rules we supposedly follow unconsciously, we need to determine precisely some neurological basis of the strings on which rules operate and the neurological functions implementing the algebraic rules of our favourite grammar. Those criteria will, quite probably, be based on how subjects behave or what they report anyway—an algebraic theory of grammar alone cannot deliver such criteria. The resulting explanation can thus hardly be said to be a better explanation of the phenomenon at hand, for it has the very same ingredients—and entails unnecessary ontological commitments. It is also hard to see what sort of empirical evidence can require such reductions. As things stand right now, Chomsky's quest for unification is merely unjustified ideology. And as long as no unification is feasible, the prospects of fusing option 1 and option 2 are very bleak.

We therefore end up with option 1, which does only work if abstraction licenses speaking of organisms as bearers of linguistic dispositions and if it can be made clear how the

[290] The *locus classicus* is Libet et al 1983.

brain is related to the whole organism. That seems to be the only way to make some sort of internalism feasible. Now, option 1 cannot be buttressed conceptually. If it could, then internalism would be motivated on a purely philosophical basis and the decision to adopt internalism for linguistic and mental properties—but not for other properties of the natural world—would be purely conceptual and would, therefore, mark a methodological dualism which Chomsky abhors. So, option 1 must be established on empirical grounds.

The mereological fallacy that Bennett & Hacker draw attention to is no thread for this revised conception of internalism. But from Hacker's own point of view, this might initially still seem a confused project. Internalism is meant to determine more precisely how mental and linguistic properties are to be studied and internalism is, therefore, subject to conceptual scrutiny. According to option 1, the only viable version of internalism, organisms (and their parts) are the bearers of linguistic dispositions. Organisms are, however, not the sort of things that can have linguistic dispositions—only persons have dispositions, but the dispositions persons have are, at least for Hacker, only dispositions of physiological health, of temperament and of character.[291] Hacker might be prepared to admit that some linguistic dispositions—like the disposition to pronounce English in a certain way—is sufficiently similar to dispositions of character. But even if this was granted, Chomsky explicitly admits that his approach cannot deal with the linguistic behaviour of persons without a considerable amount of idealisation and abstraction.[292] Internalism must, therefore, seem ill-conceived as long as we do not redefine the notion of a linguistic disposition so that it makes sense to speak of the dispositions—qua one-way powers—that Chomsky is interested in.

Chomsky takes his and his followers' research to have shown empirically, that human organisms have linguistic dispositions and that linguistic dispositions are more like dispositions of physiological health than dispositions of character. He thinks that organisms are what biology studies and he also thinks that his grammar explains linguistic properties in so far as it is a mark of human biology, i.e. part and parcel of the biological endowment of humans.[293] The driving intuition seems to be that biology studies, among other things, organisms and that such a study involves, among other things, ascribing dispositions to organisms. Chomskians might argue that empirical findings can directly trigger a revision of our concept of a linguistic disposition so that organisms can have them too. They could think that empirical evidence is always evidence for or against something and the most suitable candidate of what evidence supports or counts against is that a concept's application

[291] Cf. Hacker 2007:119
[292] The first explicit statement of this (at least as far as I am aware of) is in Chomsky 1965:4.
[293] Cf. Chomsky 2000:1-5

conditions are empirically adequate. But such a view violates the assumption that there is a distinction between a factually correct application of a concept and an application of a concept in accord with the rules constitutive for it—you can incorrectly apply a concept even if you grasp it and one incorrect application does not necessarily mean that you do not grasp the concept after all.

The whole disagreement between Hacker and Chomsky now boils down to the following point: Hacker thinks that empirical truths cannot answer philosophical problems and, *pari passu*, directly trigger a revision of mental or linguistic concepts; Chomsky thinks that empirical truths can directly answer philosophical problems. Hacker of course admits that mental and, presumably, linguistic concepts can be revised in order to make better sense of empirical data.[294] But he is not prepared to admit that empirical truths answer philosophical problems and *thereby* trigger conceptual revision. Chomsky, on the other hand, thinks that empirical truths can fully answer some philosophical questions and, more specifically, that there is no *apriori* reason why his research cannot count as answering some philosophical questions and directly licenses, thereby, conceptual revision.

The revised conception of internalism (which construes it as requiring that organisms have linguistic dispositions and which builds on some story about how a brain is related to a whole organism) can also be made sense of if we admit Hacker's view of how conceptual revision is related to empirical findings. On that view, we may employ the notion of a linguistic disposition in accord with a revised internalism, if we make clear what the conditions for a correct application of the term is and what logical consequences follow from it. This is, *pace* Chomsky, something which happens within philosophy and to which empirical data cannot directly contribute. To see this, we now turn to an invented example.

Take the concept of a child's capacity to read. We explain the concept of a child's capacity to read by describing how expressions such as 'she can read', 'he can read', 'she reads well', 'this is a bit hard for them to read', 'she can read music, but letters are still difficult for her', 'he can read letters, but he cannot read music well' etc. are actually used. If we do this carefully enough, we may extract the following rule from this: a child is capable to read if he or she is able to produce fluent speech or sounds from written symbols (e.g. letters, music notes or pictograms). Once we have such a rule, the conceptual analysis is complete, because we can explain what it is to satisfy the concept and under what circumstances we can apply it.

Now, a linguist might find that almost all children have difficulties reading the

[294] Cf. Bennett & Hacker 2003:384

sentence ‘the old man the boat’ fluently. Testing a large number of children who read well in general, she finds only a few children who read ‘the old man the boat’ fluently. Curiously enough, she finds that those children who read the sentence fluently understand that ‘man’ can also be a verb. Even though the linguist would say that a child is not capable of reading when he or she does not produce fluent speech from letters, she makes an exception for the sentence ‘the old man the boat’. She may even make this exception, because the parents (and most other people she talked with) insist that a child can read even if fluent speech can usually not be produced when a child has to read out ‘the old man the boat’. It is important to note that, in this little thought experiment, the linguist changes her use of ‘he or she can read’ based on the observation regarding ‘the old man the boat’ and in accordance with a suitable sample of common parlance. Does she thereby change the concept of the capacity to read?

I think that the example shows that it makes little sense to say that the empirical findings did, in and by themselves, change the concept or that they even triggered a specific way of changing it. Rather, the linguist examined the data and she examined how she and other use language in order to revise the conditions under which the concept of the capacity to read is applied. One might assume that she also adjusted the theory and that she thereby made clear what logical consequences of applying the revised concept are. So I do think that the example makes clear why Hacker’s conception of discovery is better than Chomsky’s: it makes little sense to hold that any empirical finding can directly influence how the application-conditions of a concept or the logical consequences of applying the concept are revised.

We should in general be careful regarding claims about what empirical research can do to support philosophy. Back in part B of the thesis, I have argued that there is a distinction between basic and non-basic concepts. And if we want to retain this distinction, we should not allow that empirical findings can always trigger a revision of what counts as applying a psychological or linguistic concept. Consider the psychological concept of will. It is employed in statements like “I want this” or “he wants that”, nobody has the concept who does not understand such statements and it is hard to see in terms of what other concepts the concept of will can be analysed. Chomsky admits that the concept of will is not something contemporary science can deal with and he thinks that it is entirely possible that it never will.[295] So,it is hard to see whether any empirical finding can ever assist in clarifying the concept of will, it seems that all we can attain can be attained in terms of analytic truths only. The upshot from this is that we must have some principled distinction between analytic and

[295] Chomsky & McGilvray 2012:97

empirical truths; that is something Boghossian, Chomsky, Hacker and I agree on.

Recall that there is just one conceptually sound notion of internalism, which does only work if abstraction licenses speaking of organisms as bearers of linguistic dispositions and if it can be made clear how the brain is related to the whole organism. Once there is an empirical basis for that revised notion of internalism, an internalist research programme can be expected to explain some mental and linguistic properties by ascribing internal (computational) states to organisms. This will account for some psychological and linguistic dispositions of persons and, by virtue of that, it will also inform a revision of the application-conditions of some common sense concepts like the concept of language mastery in general or the concept of the capacity to read in particular. But how can such a research programme help with any of the philosophical problems under discussion in the present thesis?

Well, there is—as seen in part A—considerable philosophical puzzlement over how we can extrapolate sentences we have never used or heard before from a finite stock of linguistic expressions. It might be that we attempt to explain the concept of linguistic extrapolation in terms of neuronal processes or in terms of a mysterious capacity to access an infinite range of linguistic expressions. If empirical research can help with a revision of the application-conditions of the concept of linguistic extrapolation in a way that rules out some of the philosophical proposals along these lines, empirical research has of course helped us to achieve more conceptual clarity—it has solved philosophical problems surrounding the proposals that were ruled out. We can hold that work by Chomsky and his colleagues has shown what constraints on word order a philosophy of language must respect in order to make sense of the systematic aspects of language use which we call syntax. This does, of course, also concern claims about how the capacity to recognise and produce syntactically well-formed sentences is acquired. And this sort of help from empirical research is certainly desirable, because it enables a refined conception of linguistic competence.

2. Logic and Language

With a viable conception of linguistic competence in hand, the next question to be dealt with is: how can we approach the relation of linguistic competence to logic? We use statements to express inferences. We can say ‘John goes to bed if he is tired, and John is tired; so he goes to bed’. We also distinguish between valid inferences and invalid inferences. Now, it seems that what makes such statements correct uses of language somehow depends on whether the inferences they express are valid or not. That is, however, a moot point. Are logical mistakes

linguistic mistakes?

Logical and linguistic mistakes are mistakes made by people. And if a thinker or speaker *S* makes a logical mistake, his or her inference does not transfer warrant from premises to conclusion. At the end of part B, criteria for such transfers of warrant have been developed. The idea was that a deductive inference by *S* in a specific context is warrant-transferring if the following two criteria are fulfilled:

1) *S*'s justification for believing the premises is suitably independent of his justification for believing the conclusion, but both—premises and conclusion—are common ground after the conclusion has been drawn
2) *S* is justified in believing that the inference is valid iff the inference can be expressed through a basic statement or *S* is justified in believing that the inference is actually truth-preserving

This proposal was meant to explain what a logical mistake is. It was not meant to explain how the validity of inferences is constituted or how their factual correctness (if there is such a thing) should be explained. The present chapter is about the extent to which linguistic competence, as explained above, can possibly constrain or perhaps even constitute what counts as inferring at all and what deductive inferential validity is.

Inferences have a certain structure in virtue of which they are valid or invalid. On the other hand, the conception of linguistic competence just developed commits us to say that all linguistic expressions available for language use have a certain structure which determines word order (and also determines, maybe indirectly, spelling, pronunciation, reading and other things)—such a structure is the grammatical form. It is also commonly assumed that statements used to express inferences have another sort of structure which determines the validity of inferences—that second sort of structure is the logical form of a statement.

Logical form determines what role a proposition can assume in inferences. A proposition is a claim expressed through a statement (a declarative sentence)—or through a part of a linguistic expression which can be paraphrased by a statement—which can usually be evaluated as being true or false. A proposition can hence figure as a premise or a conclusion of inferences.

With grammatical form on the one hand and logical form on the other, we can ask ourselves how those forms are related. Because it seems natural to say that grammatically well-formed statements can be used to express inferences, the gap between the two sorts of form should not be too wide. Even though it appears that logical form presupposes grammatical form, it is not clear whether the role linguistic expressions play in inference somehow constrains or determines their grammatical function. From a Chomskian point of

view, however, inferential roles do not constrain or determine grammatical functions if inferential roles are characterised in terms of truth-conditions or in other terms drawing on what facts obtain in the environment of an individual. Grammatical functions (at least the most basal ones) are part of human genetic endowment and are not acquired in any sense by an individual from her or his environment when growing up.

Asking how grammatical and logical forms are related is not simply an exclusive problem for philosophers of logic with little impact on other issues in science and society. After all, human beings reason and that shows up in how they interact by using language and in many of their non-linguistic actions. Sound reasoning requires not only judging well and inferring validly, but it also requires an appropriate expression. Such an appropriate expression may turn out to require human linguistic powers or not, because the capacity to express reasoning may obtain or not. Asking how grammatical and logical form are related hence means enquiring into certain central aspects of what the concept of reasoning amounts to in detail and it specifically means enquiring into whether human linguistic powers and the power to reason are to be construed as inherently related. We must, hence, ask whether reasoning requires language or not.

Paul Pietroski suggests in some of his recent works that there is some considerable structural affinity between logical form and grammatical form. His proposal requires, however, construing logical form in terms of a classical second-order predicate logic and it also requires a refined construal of grammatical form along Chomskian lines. The aims of the present chapter are, first, to introduce and explain Pietroski's proposal and, second, to criticise what he takes to be the central upshot of his discussion. Whereas Pietroski favours a Davidsonian reading of his purported results, arguments will be presented which suggest a preferable alternative. The alternative takes up some of Pietroski's points but reinterprets them along lines first suggested by Friedrich Waismann and Ludwig Wittgenstein. The resulting picture I shall argue for takes grammatical forms to be, strictly speaking, the only forms there are. I adopt a version of the idea that natural language, as it is commonly used, contains everything required for inferential relations. Grammar accounts for what sort of structures could possibly matter for inferring by providing principles of word order and their transformations. And rules of language use then settle what possible transformations count as warrant-transferring, i.e. of which syntactically licit transformations we can know whether they are logically valid. The rules of language use fulfil this function by constituting what counts as violating the familiar conditions:

1) *S*'s justification for believing the premises is suitably independent of his justification for

believing the conclusion, but both—premises and conclusion—are common ground after the conclusion has been drawn

2) *S* is justified in believing that the inference is valid iff the inference can be expressed through a basic statement or *S* is justified in believing that the inference is actually truth-preserving.

The resulting picture might seem to allow for a variety of calculi. The variety is, however, restricted by construing the notion of a valid inference as a syntactically licit transformation of linguistic expressions which preserves truth—a valid inference hence preserves truth and it employs syntactically well-formed expressions throughout. As long as we distinguish epistemological issues (i.e. transfer of warrant from premises to conclusion) from issues surrounding the notion of formal validity, the variety of logical calculi allowed should be manageable.

Medieval Logicians on Logical Form and Grammatical Form

Pietroski (2006/2009) starts out with some historical reflections on the topic and it is informative to follow him in this, as it puts the problem introduced above into perspective. It also allows us to track down and make up for an important omission in Pietroski's story.

Not all philosophers concede straightaway that grammatical and logical forms are distinct. It is the central idea of a mental language common to all thinkers that there is a unique language in which thinking is conducted and for the structure of which grammatical and logical form fall together.

The idea of a mental language common to all thinkers is an old one. Medieval logicians enquired into the possibility that all propositions can be composed from categorical propositions, propositions with a subject-copula-predicate form, and some combining elements called 'syncategoremata', which were thought to merge categorical propositions into complex propositions. That enquiry was often thought to reveal the structure of a mental language common to all thinkers, a language which lies underneath the languages actually in use.[296] They saw only few differences between the logical forms they found in reasoning and the grammar of actual sentences—especially since any proposition was thought to have a subject-copula-predicate structure derivable from categorical propositions which have only one subject, one copula and one predicate. And as such categorical propositions are segmented into the grammatical elements of subject, copula and predicate, logical form—qua

[296] Prominent defenders of such views were William of Ockham (cf. Loux 1974) and John Buridan (cf. Klima 2001).

propositional structure—simply is the grammatical form of present tense indicative sentences. Logic appeared to them to be a special branch of grammar. It was thought to be that part of grammar which concerns the mental language, because meaningful thoughts are simply categorical propositions (or composites of them).

William of Ockham and John Buridan both believed that the compositional principles of grammatical form will explain central aspects of how logical form and categorical propositions–qua meaningful thoughts–are composed, while they also allowed for grammatical forms which are not inferentially relevant. They were most interested in those aspects of how grammatical and logical form is composed which were expected to shed light on ontology. That is why enquiries into singular terms claim centre stage in their writings on logic and language. Metaphysical issues (and a nominalist agenda) motivated their quest for understanding language and logic.

But projects of that sort encountered several problems. One has to do with quantification. Medieval logic cannot deal with quantifiers as logically significant constituents of what it conceived of as predicates. Some arguments which involve quantifiers would turn out valid, although no valid logical form could be found. Consider (1):

(1) Some patient respects some doctor, and every doctor is a senator; so some patient respects some senator

The argument is valid, but does its logical form display the validity? Using variables to denote singular terms which can fulfil the grammatical functions of subjects and objects, one could analyse (1) as:

Some *P* is *T*, and every *D* is an *S*; so some *P* is *U*.

The analysis does not recognise that there is a logical relation between *T* and *U* in the actual argument, as the relation between *T* and *D* on the one hand and *S* and *U* on the other is obviously not reflected in the form. Pietroski considers another possible analysis:

letting *Ř* be a variable ranging over relations,
some *P Ř* some *D*, and every *D* is an *S*; so some *P Ř* some *S*.[297]

This alternative analysis solves the problem in (1), but it does not help with other cases in which we want quantifiers as logically significant constituents of predicates. This becomes clear if we introduce relative clauses, as in (2):

(2) Some patient respects a doctor who frequently eats some vegetables, and every doctor is a senator; so some patient respects some senator who frequently eats some vegetables.

Unless one's logic can acknowledge the inferential significance of quantifiers that occur as

[297] Pietroski 2006:825

parts of predicates and allows for inferences from more complicated predicates to simpler predicates contained in them (like the inference from 'some doctor who frequently eats some vegetables' to 'some doctor'), one cannot find an appropriate logical form for (2).

Notice a point Pietroski does not mention. Buridan and Ockham employ a notion of signification—both hold that terms may signify things in the world. For Ockham, a term like 'tree' signifies a thing *x* if 'This is a tree' is true when pointing to *x*, but a term like 'brave' may signify bravery even though bravery itself is not brave.[298] This strongly suggests that Ockham regarded "signification" to be independent of predication. A more explicit statement along these lines was forwarded by Buridan who held that what a term signifies should be specifiable independently of what a proposition means in which it occurs. Buridan's notion of signification seems to be closer to what we understand by 'reference', because a term signifies by standing for what it ordinarily signifies or by standing for something in a way that departs from common usage.[299] So we may infer from this that for Ockham and Buridan the reference of a singular term can be fixed independently of what a proposition means.[300] This does, however, jar with Pietroski's view. He analyses grammatical subjects and objects as monadic predicates the reference of which can only be fixed once it is clear what the proposition means in which the predicates occur.[301] This difference should be held in mind for what follows.

Frege's Innovations and the Separation of Logical Form from Grammatical Form

Gottlob Frege is commonly supposed to have resolved the difficulties of medieval logicians (which they themselves had inherited from Aristotle) by taking propositions to have a function-argument structure rather than a subject-copula-predicate structure. Frege adopted the function-argument structure from analysis and approached inferential validity in terms of truth and falsehood. For Frege, the inferentially relevant content that a sentence expresses is to be accounted for in terms of truth-conditions. Building on this, he defined semantic values for sub-sentential expressions as that feature of them which contributes to the truth-conditions

298 Cf. Ockham *Summa of Logic* I.33 (translated by Loux 1974).
299 Cf. Klima 2001:253-6
300 I should probably note here that in part B I merely reject the claim that any world-word relation is paradigmatic for meaningful language use. This does not rule out that the reference of a singular term can be fixed independetly of what the propositions, in which a singular term occurs, mean. The point is subtle, but I have no objection against the sort of view that I find in works by Buridan and Ockham.
301 Cf. Pietroski 2005:ch. 2; see part 1 of Ben-Yami 2004 for a comprehensive discussion of the roots of that strategy and the more general problems it gives rise to.

of the sentences in which they occur.[302]

Based on these ideas, Frege was able to avoid accounts of inferential validity based on an analysis of subject and copula. The semantic values of predicates, sentential connectives, names and quantifiers could now be defined in terms of truth-values and the new mathematical concepts. So, the semantic value of a predicate was construed as a first-level function from objects to truth-values—a predicate like 'is red' hence maps objects like red apples onto truth-values yielding the value 'true' for red apples and the value 'false' e.g. for green apples.

Logical concepts like sentential connectives can be handled along these lines. The semantic value of a sentential connective is then simply a first-level function from truth-values to truth-values—a connective like 'and' hence maps two true sentences like 'John is big' and 'John is male' onto the value 'true'. But if either 'John is big' or 'John is male' is false, the truth-value of 'John is big and John is male' will also be false.

All of this also allows a fresh view of names. The semantic value of a name is the object it denotes and names function as arguments for first-level functions. If we thus take the name 'John', which denotes the big individual male John, we can plug it into either the predicate 'is big' or into 'is male' and the functions expressed by those predicates will directly yield the value 'true' as the semantic value for either declarative sentence.

The biggest advantage of Fregean over medieval logic is, however, the introduction of quantifiers. The semantic value of a quantifier is a second-level function from first-level functions to truth values. So if we take the semantic value of the predicate 'is male'—which is a first-level function—and ask how that is related to truth-values, we find that a second-level function may decide whether truth-value we get for each argument we plug into the first-level function. So, the quantifier 'For all x' yields the value 'true' for the predicate 'x is male' if the predicate applies to every object; thus one gets the value 'true' if every object is male and one gets the value 'false' otherwise. This allows us to handle in a straightforward way what was problematic for medieval logicians; a statements like (3) can now be analysed as (3'):

(3) Some patient respects a doctor who frequently eats some vegetables

(3') Let $\exists$ denote the first-order quantifier 'some', $P(\_\_)$ denote the predicate 'is a patient', $D(\_)$ denote the predicate 'is a doctor', $V(\_\_)$ denote the predicate 'frequently eats some vegetables', and $R(\ldots,\_\_)$ denote the relation '…respects__'; $\exists x \exists y[P(x) \,\&\, D(y) \,\&\, R(x, y) \,\&\, V(y)]$

That is, however, only the tip of the iceberg. Devised for independent purposes, Frege's

[302] I adopt and adapt all the canonical definitions of Frege's semantics from the summary in Miller 2007:11/86-7.

second-order quantifiers (qua third-level functions from second-level functions to truth-values) allowed sentences like

(4) If a horse and a cow are black, there is at least one property that a horse and a cow have in common

to be analysed as

(4') $\exists a \exists b(Fa \,\&\, Fb) \rightarrow \exists X(Xa \,\&\, Xb)$

The semantic value of the consequent can be captured by:

(4*) '$\exists X(Xa \,\&\, Xb)$' is true iff there is a function, X, that maps both the individual a and the individual b onto the truth-value true

Frege uses second-order quantifiers to derive an important technical result in part II of his groundbreaking *Begriffsschrift* (1879), where he introduces a logical notation called 'Concept-Script' (*Begriffsschrift* in German). He defines the concept of succession (i.e. following in a series) with it, which, if combined with his definition of a hereditary property, yields a purely logical characterisation of mathematical induction.[303] In other words, Frege uses second-order quantification to give a characterisation of arithmetically correct extrapolations in purely logical terms. This is significant, because the Peano-Dedekind axioms for arithmetic include mathematical induction as one of the axioms. It fuelled Frege's hope of accounting for all of arithmetic in purely logical terms by providing characterisations of all the axioms in his Concept-Script. This is also the ancestor of the idea that recursion, and semantic compositionality with it, can be defined in terms of truth and, hence, within the confines of a truth-conditional semantics for natural language. It hence appears that Frege is the forefather of truth-conditional semantics and truth-conditional approaches to semantically correct language use.

With this idea in the background, Frege has provided the means for analysing logical form and the inferential links between propositions in a purely mathematical way—and that is something which appears to do a good job for mathematical statements and the proofs they are used to construct. But does it also work for ordinary language use and the inferences we find expressed there?

It should be obvious that analysing propositional structure in terms of arguments and functions instead of subject, copula and predicate leads to a conception of logical form which places it much further away from the actual grammatical forms of sentences. If grammatical form does not matter much anymore for logical form, sentences like

(5) Someone trusts everyone

can, if analysed based on Frege's proposal with $T(x, y)$ denoting the relation 'x trusts y', be

[303] Cf. Beaney 1997:75-8 for a concise summary.

paraphrased either as

(6) There is someone who trusts everyone

(6*) $\exists x \forall y[T(x, y)]$

or as

(7) Everyone is trusted by someone or other

(7*) $\forall x \exists y[T(x, y)]$

An immediate problem is that (6) is a much more natural way of parsing (5) than (7). But if grammatical form does not count much for what the logical form is, there is no reason to suppose that (6*) is a better formalisation than (7*), even though it represents the natural reading.

There is also the more general question of whether an active sentence allows for other inferences than its passive counterpart.[304] Even if there was a difference in English, there certainly is no such difference in all languages. In Sanskrit, for example, one would often chose a passive sentence instead of its active counterpart, because present passive forms are much easier to form syntactically than most present tense forms. It is for this pragmatic reason that a Sanskrit philosopher would usually treat a present passive sentence as conveying just as a much as its active counterpart. From that perspective, the natural language sentence 'someone trusts everyone' can be explained by paraphrasing it as 'there is someone who trusts everyone' or as 'everyone is trusted by someone or other'.

This leads straightaway to the question how formalisations of natural language statements are, then, constrained. More precisely, since logical form is thought to have a function-argument structure while grammatical form does not, the logical form of (5) can equally well be (6*) or (7*). Under this assumption, the statement 'Someone trusts everyone' can be used to indicate two different propositions and is, *pace* perfectly normal intuitions concerning natural language use, ambiguous. That can be taken as a reason to suppose that grammatical form is much less precise than logical form and that natural language is logically deficient.[305] Of course, anyone sensitive to how English is actually used must find this plain wrong, but such a sentiment is a far cry from understanding precisely what is going on here.

Frege initially assumed the function-theoretic approach to be sufficient but subsequently refined his view by distinguishing between the *Bedeutung* and the *Sinn* of expressions. While the *Bedeutung* of an expression was to be the object referred to by a

[304] Cf. Glock (2007) who argues that Ben-Yami's (2004) reasons for distinguishing inferences drawn from active sentences from inferences drawn from their passive counterparts are not watertight. Concerning this one should bear in mind that Ben-Yami's distinction between the inferential import of active sentences on the one hand and passive sentences on the other is not absolute. His generalized rules of transposition (ch. 11) do allow truth- and warrant-preserving active-passive conversions.

[305] Cf. Pietroski 2006:827

singular term, a particular truth-value for a sentence or a range of truth-values for a function-expression, the *Sinn* of an expression, is a way of how its *Bedeutung* is presented or given (*Weise des Gegebenseins*).

The standard example is that the names 'Hesperus' and 'Phosphorus' both denote the planet Venus, which is their *Bedeutung*, but each presents the planet in a different way. Similarly, the functions 'G1(__)= ((__) x 2) : 3' and 'G2(__)= ((__) : 3) x 2' present the same range of values in a slightly different way, as their treatment of the argument differs without any impact on the range of values they produce or the domain from which we can pick arguments appropriate for them.

For Frege, who thought that all of arithmetic is reducible to what is expressible with his logical notation (his Concept-Script), mathematical sentences can also have the same *Bedeutung* while the ways of presenting them differ. The statements '5 + 7 = 12' and '8 + 9 = 17' both denote the particular truth-value 'true', but they present it in a different way. That idea is obviously readily extensible to statements like 'this is Hesperus' and 'this is Phosphorus'. Different ways of presenting a truth-value signify different ways in which one can come to know what is truly the case.

In the case of arithmetical statements, and statements in formal languages (viz. Frege's Concept-Script) in general, the way the true and the false are presented by a statement is hence thought to be uniquely determined by the inferential relations the statement has to the other statements and the denotations of the constituents of statements (i.e. the denotations of the relevant functions and arguments). It is less clear how exactly the distinction between *Sinn* and *Bedeutung* is to be drawn for natural languages and a variety of proposals have been made.[306]

The idea that meaningful linguistic content can somehow be described through giving the conditions under which a sentence is true, its truth-conditions, has been highly influential since Frege's times—we have already discussed some varieties of the proposal. But together with this, the originally Leibnizian idea that natural languages are not as precise as ideal languages (such as Leibniz's *calculus ratiocinator* or Frege's Concept-Script), or that they are downright logically deficient, has spread as well.

The result from this development was the establishment of two camps which are both pessimistic about how much we can learn about logical forms from grammatical forms in natural language as it stands. One camp followed Frege and promoted ideal languages for the purposes of scientific reasoning—on this view, logic provides a language superior to natural

[306] Michael Dummett, for one, wrote (1975:118 and 1973/81:ch. 5) that *Sinn* determines the conditions under which a sentence is true, i.e. under which its *Bedeutung* is the true.

language. The other camp took up the idea from Wittgenstein's *Tractatus* that logic provides a notation which clarifies the logical forms buried underneath the surface structure of natural languages—on that view, logic indicates the depth structure of natural language.[307]

Both camps focused on first-order quantification. But Frege, as was mentioned already, had allowed second-order quantification, because it made it seem possible for him to analyse the Peano-Dedekind axioms for arithmetic in purely logical terms.[308] Subsequent philosophers advocated a restriction to the first-order fragment of Frege's logic, because Frege's own proposal generated Russell's paradox by allowing predicates such as 'is not a member of itself'. The paradox ensues, because 'is not a member of itself' may take itself as an argument and yield '"is not a member of itself" is not a member of itself'. The resulting statement is paradoxical, as it can only be true if 'is not a member of itself' is not a member of itself—but in that case the statement would also be false for it then would be a member of itself.

The focus on first-order logic was not only motivated by the allegedly paradoxical nature of second-order logic. Other reasons were that Gödel had proved the completeness of the first-order fragment and that Quine held that second-order quantification illicitly treats predicates as names for sets. Pietroski notes:

> On Quine's view, we should replace '$(Fa \,\&\, Fb) \rightarrow \exists X(Xa \,\&\, Xb)$' with explicit first-order quantification over sets, as in '$(Fa \,\&\, Fb) \rightarrow \exists s(a \in s \,\&\, b \in s)$'; where '$\in$' stands for 'is an element of', and this second conditional is not a logical truth, but rather a hypothesis (to be evaluated holistically) concerning sets.
>
> The preference for first-order regimentations has come to seem unwarranted, or at least highly tendentious; see Boolos (1998). But it fuelled the idea that logical form can diverge wildly from grammatical form. For as students quickly learn, first-order regimentations of natural sentences often turn out to be highly artificial. (And in some cases, such regimentations seem to be unavailable.) This was, however, taken to show that natural languages are far from ideal for purposes of indicating logical structure.[309]

The gist of Pietroski's own work is that second-order regimentations of natural language sentences are much less artificial and may provide us with a basis for finding structural affinities between grammatical and logical form. His discussion of Russellian descriptions is a case in point.

How Russellian Descriptions Suggest a Separation of Logical Form from Grammatical Form

[307] Cf. Hacker 1986:179-80
[308] Cf. Zalta 2010
[309] Cf. Pietroski 2009:§6

Frege did not distinguish names, such as ‘John’, from descriptions, such as ‘the tall boy from Canada’, and that makes the specific elements of a description logically irrelevant. This turned out to be unsatisfactory. Following Russell (1919), statements (8)-(11) can, if names and descriptions remain undistinguished, all be thought to have (12) as their logical form:

(8) John sang.

(9) The tall boy from Canada sang.

(10) The boy from Canada sang.

(11) The boy sang.

(12) $\exists x$[Sang(x) & x=b], with ‘b’ denoting the relevant individual, John

But it is counterintuitive to analyse (8)-(11) as (12), for the logical form in (12) does not reflect the inferential significance of the content of each statement. Based on the conception of a proposition that Ockham und Buridan favour, one would think that (12) is an inadequate rendering of (8)-(11), because, on the one hand, if the tall boy from Canada sang, then, surely, the boy from Canada sang and we can also infer that the boy sang, but, on the other hand, we cannot infer that the tall boy from Canada sang from the proposition that the boy from Canada sang and neither can be inferred from the proposition that the boy sang. Furthermore, none of (9)-(11) can be inferred from (8)—or (8) from either of them—unless ‘the’ signifies John. Such inferences cannot solely be based on the logical form (12), they require that (8)-(11) are understood to be referential propositions.

Russell’s strategy is, however, different. A first step towards a solution consists in looking more closely at descriptions. The name ‘John’ can be paraphrased by any definite description beginning with ‘the’ which also succeeds in picking out John as the relevant individual. ‘The’ seems to mark one contextually relevant boy, an intuition which (12) seems not to explain adequately: it is not the logical form in (12) which accounts for the (context-relative) uniqueness, but the fact that ‘b’ denotes John, the relevant individual. Uniqueness, marking one contextually relevant boy, should also be accounted for in a way that makes it possible to read it off of the logical form.

Based on such considerations, Russell argued that we must analyse the content of descriptions through a specific first-order regimentation which shows the logical relevance of all the elements contained in the description. Russell circumscribed the uniqueness usually expressed through ‘the’ and provided logical forms such as (13) for (11):

(13) $\exists x$\{Boy(x) & $\forall y$[Boy(y) $x = y$] & Sang (x)\}

(13*) There is at least one x which is a boy and, for all y, if y is a boy, y is identical with x and x sang.

Thus analysing 'the' in terms of an existential quantifier, no particular boy is the constituent of the proposition; 'the boy' does not, pace the analysis in (12), stand for a particular argument that saturates the function Sang(__).

Recall that, in (12) we took *b* in 'Sang(*b*)' to denote the relevant individual, John. If we follow Frege and do not distinguish names from descriptions, 'the boy' has to be analysed as an argument-expression and, as such, denotes a particular individual. From this Fregean perspective, the definite article in natural language misleads us into assuming that there is a particular boy, because it treats 'the' as having an object for its semantic value, just as a proper name does. But Russell's alternative analysis proposes (by expressing uniqueness with first-order quantifiers and identity) that the logical form does not employ a propositional constituent which is indicated by 'the'; for Russell, the semantic value of 'the' is hence not analogous to the semantic value of a proper name. Neither does the conception of uniqueness represented in the logical form allow that uniqueness be associated with the definite article 'the', which is a distinct element of the grammatical form of (11) and, *pace* Russell's analysis, naturally thought to be firmly associated with a sensible conception of uniqueness.

The first-order fragment of Frege's logic, applied à la Russell, can be used to analyse descriptions and distinguish them clearly from Fregean names—the price is that the wedge between the grammatical form of natural language statements and their logical form is driven yet a bit further. There is, however, a problem with this that Pietroski does—curiously enough—never mention. Strawson, who construed the relation between reference and truth similarly to Buridan, objected to Russell that his analysis of sentences like 'the boy sang' yields the truth-value 'false' if there is no boy. For Strawson, it would be more natural to say that 'the boy sang' has no truth-value if there was no boy, because the sentence can only have a truth-value if there was a boy. The sentence would be false if the boy did not sing and it would only be true if the boy actually sang.[310] So, much like Buridan, Strawson thinks that we can refer with a referring term independently of the meaning of a proposition or sentence. We shall consider below whether omitting this fact about Buridan and Strawson poses a problem for what Pietroski is after.

An Alternative Notation

By contrast to Russell's treatment of descriptions, Pietroski wants to close the gap between logical and grammatical form. Taking up cues from Montague (1970) and Boolos (1998), he

[310] Cf. Strawson 1950

provides a logical analysis of descriptions which is as precise as Russell would want to have it, while also featuring a notation of quantification which suggests a parallel between grammatical and logical form.

The important idea of the alternative notation is that second-order quantification, i.e. quantification over predicates, can be combined with quantifier restrictions that assign particular domains to quantifiers. He thus reintroduces a neglected aspect of Fregean logic to analyse logical form and, at the same time, weakens it to avoid Russell's paradox.

Let us quickly review why Russell's notation is taken to show that logical form does differ from grammatical form.

(11) The boy sang.

was analysed as

(13) $\exists x\{\text{Boy}(x) \ \& \ \forall y[\text{Boy}(y) \ x = y] \ \& \ \text{Sang}\ (x)\}$

because 'the' is not taken to designate a unique boy. Note that, due to the fact that the semantic value of 'the' is not analogous to that of a Fregean name, the definite article does not, contrary to ordinary language intuitions, express singular reference. The logical analysis in (13) suggests that capturing the inferential significance of the definite article in (11) requires an awkward combination of logical constants, that no one element in the logical form can capture that one element in the grammatical form which is naturally thought to express uniqueness. Furthermore, it is insinuated by this that it does not matter much for the inferential significance of the definite article in (11) whether a unique boy is referred to or not.

Pietroski now claims that an alternative notation presents us with the logical form in such way that a structural affinity between logical and grammatical form appears.[311] In other words, the claim is that once we employ a second-order restricted-quantifier notation, one specific element in the logical form can indeed capture the definite article.

So, let X and Y denote concepts with objects in their extension (construed as the set of things that the function maps onto the true) and let $|Y|=n$ denote a restriction of the extension of concept Y to n objects—'n' signifies the cardinality of Y. To make things easier, let the natural language quantifier 'some' be synonymous with 'at least one', it is represented by $\exists$. On that background, we can write down a wide range of very specific quantifiers:

(14) $\exists x{:}Y(x)$

should be read as

(14*) at least one x in the extension of Y

[311] Pietroski 2006:833 and 2009:§8

and, accordingly,

(15) $\exists x$:$Y(x)$ & $|Y| = 5$

is to be read as

(15*) at least one x in the extension of Y which contains 5 objects

Now, we can rewrite (13) using the alternative notation and get (16), which can be read as (11) or (16*). This does, just as much as Russell's proposal, neither require that 'the boy' or 'the' are propositional constituents, because the new quantifiers do not refer like the natural language expressions do.

(11) The boy sang

(13) $\exists x$\{Boy(x) & $\forall y$[Boy(y) $x = y$] & Sang (x)\}

(16) $\exists x$:Boy(x)[Sang (x)] & |Boy| = 1

(16*) for some individual x such that x is a boy, x sang, and exactly one (relevant) individual is a boy

We may also stipulate that 'the' is relevantly like other quantifiers such as 'some', 'at least one' or 'all'. If we now let 'the' to be denoted by the quantifier '!' in the alternative notation, we get (16**), the structure of which captures (11) in a way that makes one element in the logical form correspond exactly to the definite article.[312]

(16**) !x:Boy(x)[Sang (x)]

But what exactly does '!' mean? How does the alternative notation capture the definite article 'the'? The answer is given by making clear that the propositional contribution of quantifiers can in general be specified in terms of intersections of the extensions of concepts Y and X:

(17) $\exists x$:$Y(x)$ [$X(x)$] is true iff the extensions of X and Y intersect

(17') $\forall x$:$Y(x)$ [$X(x)$] is true iff the extension of X includes the extension of Y

(17*) !x:$Y(x)$ [$X(x)$] is true iff the extensions of X and Y intersect, and $|Y| = 1$

Pietroski clearly states what he takes to be the advantage of the alternative notation:

> While there may be a boy one refers to in saying 'the boy sang', that boy is not a constituent of the quantificational proposition indicated with '!x:Boy(x)[Sang(x)]' […]. But far from showing that the logical form of 'the boy sang' diverges dramatically from its grammatical form, the restricted quantifier notation suggests that the logical form closely *parallels* the grammatical form—'the boy' and 'the' do correspond to constituents of '!x:Boy(x)[Sang(x)]' —at least if [...] we allow for logical forms that represent quantificational propositions as claims to the effect that a certain relation holds between a pair of (perhaps complex) predicates.[313]

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[312] Note that '!' works pretty much like Russell's iota-operator. The only difference is that it can be restricted to range over the extension of a predicate like 'Boy(x)' in expressions such as '!x:Boy(x)'.

[313] Pietroski 2009:§7

According to Pietroski, the story goes somewhat like this: Russell had suggested, based on his notational means, that his analysis shows that logical form is to be dissociated from grammatical form; but the alternative notation gives us a way of associating logical form with grammatical form again without jeopardising Russell's insight into the inferential roles of the constituents of descriptions.

That is—without further arguments buttressing the claim—wrong, for that the boy sang is *prima facie* a referring proposition and not a quantificational one. '!*x*:Boy(*x*)[Sang(*x*)]' formalises the proposition that there is exactly one object amongst the boys that sang—note here that the conditions under which this quantificational proposition counts as true or false does not require reference. For the proposition that the boy sang, much is different. There, the conditions under which the proposition counts as true or false does require reference. The proposition is true iff the boy referred to sang and the proposition is false iff the boy referred to did not sing. If there is no boy, the proposition will not have a truth-value at all—even if the sentence expressing it is grammatically well-formed.

What remains to be assessed now is whether Pietroski can provide further explanations which make clearer that the parallels between logical and grammatical form which interest him are no coincidence and that there actually is a philosophically interesting affinity between grammatical form and logical form in general. In order to do that, Pietroski adduces a refined analysis of grammatical form, which allegedly suggests close structural affinities with logical form (presented in the alternative notation) for a range of cases which is large enough to be interesting.

The Alleged Affinity between Grammar and Logic

Whatever grammatical form is meant to be, appealing to it must somehow bridge the gap between the manifest grammatical subject-predicate form of declarative sentences like

(11) The boy sang

and its presumed logical form

(16*) !*x*: Boy(*x*)[Sang (*x*)]

which has a function-argument structure. It should, furthermore, be expected to bridge the gap between sentences like 'The boy liked every doctor' and logical forms like '!*x*:Boy(*x*) & ∃*y*:Doctor(*y*) [Likes(*x*, *y*)]', where Pietroski's notation does not yield logical forms which completely parallel grammatical forms. For the sake of argument we should follow Pietroski and presume that these sentences do not express referential propositions or that such

propositions can be reduced to quantificational propositions in a Russellian fashion. Once Pietroski's position has been fully explained, I shall return to objections flowing from this point.

Taking in Pietroski's ideas about logical form requires refining the conception of grammatical form. Pietroski tries to get at such a refined conception by following Noam Chomsky's assumption of specific levels of representation for grammatical forms. Two levels of representation—understood in the technical sense—are salient here: we have deep-structures, from which manifest grammatical form, surface-structures, are developed through specific transformations. Those transformations were initially thought to be best described with a complicated transformation algebra, but meanwhile it has been claimed that a much leaner apparatus can do the job just as well.[314]

It might be in order to say something about deep structures and connect it with the introduction to the Chomskian programme given above. Deep structures are composed from a lexicon by specific transformations and reflect semantically relevant relations between predicates and their arguments. More specifically, a deep structure clarifies (amongst other things) what internal and external arguments sentences have. An internal argument is an argument which turns relations with n>2 argument-places into relations with n-1 argument-places and relations with n=2 argument-places into predicates. An external argument saturates predicates and turns them into singular terms or statements.

Consider, for example, the 3-part relation '(__) lives between *x* and *y*'. If '*y*' is exchanged with the name 'John', the internal argument 'John' turns the 3-part relation into the 2-part relation '(_)lives between *x* and John'. By replacing '*x*' with the internal argument 'Mandy', we get the predicate '(__) lives between Mandy and John' which, then, can be saturated by an appropriate external argument and thus form a statement. Based on this it has been proposed that Chomskian deep structures are grammatical forms which can be systematically associated with logical forms with function-argument structure.[315]

A (very) crude introduction to the difference between deep and surface structure can be given by considering the syntactic relation of 'who' and 'saw' in (18), its analyses on the deep level (18D) and the surface level (18S), and the statement (19) with a gloss on 'who'. The *explanandum* here is: why can (19), which suggests a relation between the pronoun 'who' and the verb 'saw', count as an acceptable paraphrase of (18), even though that relation is not

[314] Cf. Chomsky 1955 and 1995a

[315] The classical accounts are Larson & Segal 1995 and Heim & Kratzer 1998, but compare also Pietroski 2005 for an alternative.

obvious in (18)?[316] (Note that indices like 'ᵢ' indicate a structural relation between coindexed positions—in the present case, between 'whoᵢ' and 'saw(__)ᵢ'–the relations in question usually being between predicates and their internal arguments.)

(18) Mary wondered who John saw

In order to clarify which parts of the sentence function as internal arguments and which function as external arguments, we compose a deep structure (18D) from the lexicon—in which the verbs and their arguments are as close together as possible—and rearrange it in order to get to the surface structure (18S):

(18D) {Mary[wondered{John[saw who]}]}

(18S) {Mary[wondered[whoᵢ{John[saw(__)ᵢ]}]]}

Based on the rearrangement of (18D) to get (18S) it appears that 'who' is the internal argument of 'saw(__)' and we can therefore paraphrase (18) by substituting 'which person is such that' for 'who' and 'that person' for the blank argument position in 'saw(__)':

(19) Mary wondered which person is such that John saw that person

The central claim of any version of a Chomskian approach to grammatical form is that there must be a *syntactic* reason why (19) can provide a gloss on 'who', as it figures in (18). Puzzling about it is that (19) suggests a structural relation between 'who' and 'saw' which is not obvious in (18). The reason, following Chomskian lines of thought, should not appeal to any semantic or pragmatic concepts, but should be expressible in terms of purely syntactic transformations.

That 'who' is an internal argument of the predicate 'saw(__)', so the hypothesis goes, is explained by assuming (18D) to be the non-manifest deep structure which is then transformed into the surface-structure (18S). (19) draws on the structural relation uncovered in (18D) and (18S) by replacing 'who' by 'which person' and filling the gap in 'saw(__)' by 'that person'. This is why (19) counts as an acceptable paraphrase of (18).

What does warrant this and similar hypotheses? Pietroski follows standard Chomskian lines when he argues that such hypotheses are required in accounting for a wide range of linguistic facts, such as the one that (20)-(22) count as grammatically well-formed expressions, while (23) does not:[317]

(20) The boy who sang was happy

(21) Was the boy who sang happy

(22) The boy who was happy sang

(23) *Was the boy who happy sang

[316] Cf. Pietroski 2006:834

[317] Op. cit. p. 835

In order to account for the allegedly surprising fact that (23) is not admissible, one needs to appeal, so the story goes, to levels of representation in order to give an algebraically viable account of it. (23) features, then, an inadmissible word-order because the deep structure (20D) does allow (20S)-(22S) as results from permissible transformations, but not (23S)-(26S):

(20D) {[the[boy[who sang]]][was happy]}

(20S) {[the[boy[who sang]]][was happy]}

(21S) Wasi{[the[boy[who sang]]][(__)i happy]}

(22S) {[the[boy[who [was happy]i sang]]][__]i}

(23S) *Wasi{[the[boy[who [(__)i happy]sang]]]}

(24S) *{[the[wasi][boy[who [(__)i happy]sang]]]}

(25S) *{[the[boy[wasi][who [(__)i happy]sang]]]}

(26S) *{[the[boy[who [(__)i happy][wasi]sang]]]}

The analysis shows that the auxiliary verb 'was' cannot be displaced from certain positions, because [who sang] seems to be something like a restricted area from within which 'was' cannot be moved to the front or the back of the statement once [was happy] has been embedded between 'who' and 'sang'.

There is a wide variety of cases in natural language use which suggest that the appeal to such restricted areas explains why certain combinations of words are systematically inadmissible. This and similar phenomena, which do suggest a certain systematicity in how words can be combined in natural languages, fuel all the different versions of the Chomskian programme and have driven theoretical linguists to minimalise the apparatus they employ more and more. Another reason to minimalise the apparatus is that the accounts of the systematicity in how words can be combined should be as general as possible. A simpler apparatus with less rules seems to have better chances to explain features of all natural languages.

Nowadays, it is often assumed that the notions of deep structure, which reflects the semantically relevant relations between predicate and argument, and of surface structure, which reflects the relations of the deep structures *modulo* some further transformations, are not needed anymore.

As far as Pietroski is concerned, the grammatical structures relevant for inferring are called 'LF'. An LF was initially obtained from surface structures by a transformation called 'quantifier raising' and showed the scope of natural language quantifiers:[318]

(27S) {Pat [trusts [every doctor]]}

(27L) {[every doctor]i {Pat [trusts (_)i]}}

[318] Cf. May 1985

LFs are grammatical forms thought to correspond to what emerged as logical form from Pietroski's alternative to Russell's analysis of descriptive content. If that structural affinity between the second-order logical forms and LFs holds generally, Frege's and Russell's reasons for claiming that natural language is deficient mainly rest on a mistaken analysis of natural language quantification, an analysis which has only become available through recent developments in theoretical linguistics and a reappraisal of second-order logic. The quantifier raising that takes place when moving from surface structures to LFs is semantically motivated: Pietroski thinks that it is a syntactic transformation which is required in order to speak and think about events. Whether or not an LF is formed correctly is, as will be shown in the next section, a matter of meaning.

There are two problems with the story Pietroski told us so far. First, Pietroski treats referring propositions as quantificational propositions without providing reasons for this controversial move. This is especially problematic, since Chomsky himself favours a Strawsonian position when it comes to reference and related topics inherited from Frege and Russell. Second, Chomsky has argued that there are good reasons to think that there are no LFs or other deep structures anymore.[319] For him, there is a lexicon—of which we know not much and which is not part of the language faculty (if narrowly construed)—and two operations merging lexical items together. At the end of the line, there are expressions (syntactically) ready for use and not logical forms ready for mentalese soliloquy. This is problematic for Pietroski, because he commits himself to a Chomskian perspective without rejecting Chomsky's reasons. As things stand so far, Pietroski's story about logical forms is anything but watertight and his story about grammatical forms is not purely syntactical.

There is hence nothing in Pietroski's account that prevents us from assuming that there is a lexicon which specifies that 'Pat' is a name that can refer and which can fulfil the function of a noun, that 'trusts' is a transitive verb with an internal and an external argument that 'every' modifies nouns and pronouns and that 'doctor' is a noun. There is no evidence against the supposition that much of this is acquired through training—even though it might be biologically constrained what can be trained and what cannot.[320] Our innate dispositions—the language faculty narrowly construed (FLN)—simply assemble items from the lexicon in a way that directly yields sentences like:

28) Pat trusts every doctor

According to that picture, which is an admittedly curious Wittgensteinian way of fleshing out

[319] Cf. Chomsky 2005

[320] Cf. Hinzen & Uriagereka 2006 for a discussion of what sort of general constraints on the lexicon we can expect.

Chomsky's views, there is nothing but a lexicon (mostly) acquired through training, dispositions to arrange the items in the lexicon and natural language use as manifest in everyday life. Pietroski has not produced anything to rule this more straightforward account out.

Pietroski thinks that his proposal, as introduced so far, opens the door for a variety of new questions about how logical form, inferential validity and grammatical structure are related. It also suggests new ways of saving the intuitions of medieval logicians, for if it can be shown that there are systematic relations between inferring and the syntactic features of all languages—such as the general form of derivations of particular LFs from a lexicon—the old idea of a mental language appears to be within reach. His story is, as I have argued, not watertight (to say the least). But there is more behind Pietroski's approach. We now turn to the considerations which ultimately motivate his views.

Pietroski's Davidsonian Suggestion

We have seen at the end of the section on Frege that his innovations did not only put substance to the Leibnizian idea of an ideal language, but also to the idea that meaningful linguistic content can be explained in truth-conditional terms. Based on the alleged success of truth-conditional approaches to meaning, Pietroski is led to suggest that Davidson has provided the foundations for a promising theory of meaning and understanding.[321] This does not, as I have argued, chime in with a more natural take on Pietroski's examples. We should thus examine the Davidsonian suggestion in detail and assess its prospects in the present context.

Pietroski's suggestion to adopt a broadly Davidsonian point of view in order to continue enquiries into the affinity between grammatical form and logical form is rooted in an account of the inferential relations between the following sentences:[322]

(29) Juliet kissed Romeo quickly at midnight.

(30) Juliet kissed Romeo quickly.

(31) Juliet kissed Romeo at midnight.

(32) Juliet kissed Romeo.

Observe that if (29) is true, (30)-(32) are true; and if (30) or (31) is true, (32) is true as well. That much is unproblematic. A problem appears, Pietroski argues, if we treat 'kissed quickly at midnight' as an unstructured transitive predicate just like 'kissed'. Let 'kissed quickly at

[321] Pietroski 2006:838

[322] Op. cit. p. 839, the Davidsonian considerations stem from Davidson's 1967b.

midnight' be denoted by the relation K*(...,___) and 'kissed' by the relation K(...,__); in that case, the inference from (29) to (32) has the following logical form:

(33) K*(x, y), therefore K(x, y)

On that formalisation, invalid inferences like

(34) Juliet kicked Romeo; therefore, Juliet kissed Romeo.

have the same logical form, since the latter does not distinguish unstructured transitive predicates, so the analysis cannot be right. Pietroski maintains that one wants to have an explanation why conditionals like

(35) If Juliet kissed Romeo quickly at midnight then Juliet kissed Romeo.

are "tautologous". Instead of treating this as a problem about formalisation—asking for which purposes (33) is a useful formalisation of the inference from (29) to (32)—Pietroski turns this into problem about the analyticity of (35).

Pietroski's use of the term 'tautology' is put in shudder quotes, because standard practice in formal logic has it that tautologies are those statements for which the truth-tables make them always true, no matter what semantic value is assigned to its elements.[323] (35) cannot be displayed as a tautology through a truth-table and therefore the technical notion of tautology does not apply. What Pietroski is after diverges from the technical notion, because "toutologous" here means that (35) is supposed to be materially analytic.

Pietroski is worried that we do not grasp firmly what the analyticity of (35) comes down to if we treat 'kissed quickly at midnight' as an unstructured transitive predicate like 'kissed'. I find it puzzling that Pietroski sees a problem here. After all, we must not treat 'kissed quickly at midnight' as an unstructured transitive predicate like 'kissed' exactly because that jeopardises the material analyticity of sentences like (35). I would therefore suggest that (35) is materially analytic, because 'Juliet kissed Romeo' and 'Juliet kissed Romeo quickly at midnight' are about the same kiss. The puzzle disappears once one sees this.

So, whence Pietroski's worries about this? My best guess is that Pietroski illicitly projects the point Russell made concerning the distinction between descriptions and names into the distinction between structured and unstructured transitive predicates. But the cases are not exactly parallel. Recall that not distinguishing between names and descriptions can lead one to wonder why (10) can be inferred from (9):

(9) The tall boy from Canada sang.

(10) The boy from Canada sang.

Under the controversial presumption that (9) and (10) are quantificational propositions, the

[323] Cf. Partee et al. 1990:107/143

conditional

(36) If the tall boy from Canada sang then the boy from Canada sang

is not always true and given Russell's analysis of descriptions, (36) cannot be called tautologous (formally analytic), as there might always be two boys from Canada (one being small and the other being tall)—that was secured by dissociating the semantic value of the definite article from the semantic value of proper names.[324]

If we take (9) and (10) to be referential propositions, logical forms do not solely determine the truth of (36) either, but truth does, as intuition suggests, depend on what the descriptions in (9) and (10) refer to and on whether those unique referents are identical. The identity claim is straightforwardly warranted by the fact that both descriptions do refer to a unique individual. (36) is, in such cases, materially analytic, because (9) and (10) refer to the same tall boy from Canada who is singing.

Pietroski's worry about (35) might now be thought to be somewhat analogous to the case of definite descriptions. If we treat structured and unstructured transitive predicates as first-order functions, the relevant inferences in (29)-(32) would not flow from the logical form and the analysis would hence fail to account for such inferential links or fail to dismiss, as Russell's analysis did, the *explicandum*. Pietroski thinks that we should analyse transitive predicates somewhat along the lines of Russell's treatment of definite descriptions. According to Pietroski, we need a way of explaining the semantic values of those predicates which enable a suitable account of the inferential patterns they license; suitability being, for his purposes, determined by whether a candidate account treats (35) as analytic.

For a proponent of referential propositions, the analyticity of (35) does not require formal logical analysis. If 'Juliet kissed Romeo' and 'Juliet kissed Romeo quickly at midnight' are about the same kiss, then ''if Juliet kissed Romeo quickly at midnight then Juliet kissed Romeo' is materially analytic—and trivially so. Furthermore, if 'Juliet kissed Romeo' and 'Juliet kissed Romeo quickly at midnight' are not about the same kiss, then no amount of logical analysis will show that the conditional 'if Juliet kissed Romeo quickly at midnight then Juliet kissed Romeo' is analytically true.

According to such a story, we can obviously rest content with materially analytic truths as they appear in natural language use. But an unnecessarily complicated interpretation of the issue might lead one to invent a new deep problem. Pietroski follows Davidson in maintaining that sentences like (29)-(32) mask important semantic structure. Davidson proposes to understand such sentences in terms of quantification over events, which render,

[324] I am indepted to Hanoch Ben-Yami for helpful comments on this.

for example, (29) as

(37) ∃e[Agent (e, Juliet) & Kissing (e) & Patient (e, Romeo) & Quick (e) & At (e, midnight)]

which can itself be paraphrased as

(38) There is an event e, such that Juliet is the agent, that it is a kissing-event, that Romeo is the patient and that it happened at midnight.

Pietroski acknowledges that it remains controversial what those allegedly masked "semantic structures" will turn out to be, but he maintains that an enquiry is warranted. He also acknowledges that, in the end, logical forms might turn out to be those masked "semantic structures" and accounting for the validity of logical inferences will then be determined by what our theory of meaning for natural languages comes to be. He writes:

> This raises the possibility that theories of meaning/understanding for natural languages will associate sentences (whose grammatical structures are not obvious) with "semantic structures" that are not obvious. Perhaps in the end, talk of logical forms is best construed as talk of the structure(s) that speakers impose on words in order to understand natural language systematically […] From this perspective, which remains tendentious, the phenomenon of valid inference is at least largely a reflection of semantic compositionality.[325]

This obviously neglects that there is a completely straightforward interpretation of the issue which does not magic masked semantic structures into the cases under discussion. Furthermore, nothing in Pietroski's presentation, which is thought to bring out the affinity between grammatical form and logical form only, necessitates or even warrants the Davidsonian perspective.

Let me rehearse the main point: the phenomenon Pietroski is interested in can be explained by simply holding that (35) is materially analytic, because 'Juliet kissed Romeo' and 'Juliet kissed Romeo quickly at midnight' are about the same kiss—and formalisations do not help us to see this, but may actually presuppose that both sentences are about the same kiss. That is a first good reason to reject the Davidsonian suggestion. Another reason is this: the Davidsonian suggestion is not mandatory if we want to adopt a Chomskian perspective on grammatical forms.

There are yet other problems with Pietroski's proposal. An important one concerns the idea that ordinary speakers impose semantic structure on words. That idea gives the impression of explaining understanding, but does not really do so.

> [P]araphrases like (37) depend on *nominalizations* which are *derived* from verbs

[325] Pietroski 2006:839

('kisses'-'kissing'); consequently they presuppose rather than explain our understanding of primary constructions like (29) (Strawson 1992: ch.8). More generally, our understanding of English sentences cannot be *explained by* the fact that we can learn to translate them into an interpreted formal language. For this is no more plausible than explaining our grasp of English by our ability to translate English sentences into Latin. Being able to translate from English into either of these two languages is a necessary condition of understanding English only for people who *already know* them.[326]

It is hard to see how Pietroski can deal with this objection. He is, after all, committed to the idea that there are masked semantic structures. It is also unclear how his interest in truth-conditional semantics can be squared with the Chomskian portion of his views. After all, Chomsky is very sceptical about the explanatory value of truth-conditions and other referential approaches to semantics.[327] It is, therefore, hard to see how a logical form which explicitly refers to events can explain inference patterns in a way compatible with Chomskian dispositionalism. Apart from that—and most importantly—the Davidsonian suggestion is a twisted interpretation of a phenomenon which merely makes clear that inferential links within natural language are material. The prospects for Pietroski's Davidsonian agenda are therefore bleak on many counts.

A Wittgensteinian Perspective

An alternative view, which is more closely related to medieval logic in its prospects, has it that logical forms are just the class of grammatical forms which are relevant for inferring. It is also an idea Wittgenstein hints at, for example in the *Big Typescript*:

> Whether one proposition follows from another must emerge from the grammar of the latter–and from that grammar alone.[328]

Baker & Hacker go a bit further by explaining inference in terms of transforming symbols:

> The simplest case of inference is making one assertion after another, linked by a 'so' or a 'therefore', given that the final assertion is (and is intended to be) a transformation of the previous assertion or assertions according to certain paradigms. An inference is an act of transforming symbols, and hence a rule of inference is a norm governing symbolic transformations.[329]

But how can these Wittgensteinian ideas be brought together at all with Chomskian grammar? We may, following some suggestions Wittgenstein made in the early and mid-Thirties, take

[326] Glock 2003:247-8; my numbering of the examples
[327] Cf. Ludlow 2000:424 and Chomsky 2000:181
[328] Wittgenstein 2005:239
[329] Baker & Hacker 2009:89

calculi—such as the algebra behind a Chomskian grammar—as good *objects of comparison*.[330] Such calculi are good objects of comparison, because linguists have successfully used them for decades to capture some surprisingly systematic properties of natural languages. After all, that was our take on linguistic dispositions all along.

Assume that we have identified the valid arguments in use in a particular discourse. A way of arranging the rules which govern those arguments consists in devising an appropriate logical calculus, i.e. a self-contained system of rules—a paradigm—as Baker &Hacker would maybe have it. Friedrich Waismann thought that such rules are intimately connected to ordinary thought:

> The logical calculus undoubtedly aims at arranging in a clear system the rules of inference which govern ordinary thought; its value is judged by how well it performs this task, by whether it is broad enough to include all the types of inference which occur in ordinary thought, yet sufficiently narrow to exclude those transitions which we do not reckon as inferences.[331]

So, any system of rules of inference which we come up with to serve as an object of comparison will also help us explain ordinary thought, i.e. ordinary reasoning. A calculus does presuppose that there are syntactically well-formed sentences on which the rules of inference can operate. And for this reason, nothing in such an account runs counter the idea that dispositions govern word-order and thus provide the material with which people can communicate and reason.

The sort of perspective I ultimately argue for has just three elements. First, there is the dispositional story about syntactic correctness. Second, there is the story about constitutive rules—which are constitutive of meaning and inference—and third, there is the story about inferential validity and transfer of warrant from premises to conclusions.

Let us start with the dispositional portion of the account. There is a lexicon of which we do not know much. Empirical research must show what the constraints on learning it are, but I guess that the acquisition of a lexicon only involves learning words and rules for combining them syntactically.[332] After some time, the faculty of language (narrowly construed) starts operating on the lexicon and generates well-formed sentences—it is exactly

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330 Cf. Baker & Hacker 2005:54-7

331 Waismann 1965:382

332 The acquisition of some concrete nouns will certainly require ostensive definition, but the rules on this level are not the sort of rules Chomsky is interested in and it must yet be shown to which extent scientific theorising can make sense of how a lexicon is acquired. I suspect that acquiring a lexicon involves ostensive definition and together with the idea that ostensive definition sets down constitutive rules for language use, large parts of the complexity of natural language use will hence influence what lexicon one acquires.

these operations on the lexicon that we best explain in dispositional terms. At the beginning, the syntactic rules governing the combination of lexical items will have to be refined, but a firm grasp of a first language will be achieved in a relatively short time. Following Chomsky, we can hope to give a formal description of the initial state of the faculty of language and of how well-formed sentences are generated. An account of reference and other aspects of actual performance cannot be given in a scientific way. The linguistic dispositions described along these lines are called 'one-way powers', because they are psychological powers not subject to human volition.

On top of the linguistic dispositions we have what was called 'two-way powers'—psychological powers subject to volition. The distinction between one-way and two-way powers does hence coincide with the distinction between syntax and semantics. Possession of two-way powers is manifested, for example, when exercising recognitional capacities through using basic statements (in which we apply primitive concepts). So, a basic statement concerning sight—'a red patch cannot be green' or 'a round circle has no edges'—will be most naturally explained through the capacity to see. A basic statement is also taken to express a constitutive rule—which is a hallmark of sense and a violation of which counts as nonsense. An ostensive definition—pointing at an apple in plain sight and declaring 'this is an apple'—is also taken to express a constitutive rule governing sense. We cannot explain these capacities in purely dispositional terms, because we can always decide not to exercise a capacity. And that is also the reason why there is no naturalistic account of them.

Linguistic dispositions explain how we generate well-formed linguistic expressions and constitutive rules explain how we endow them with meaning. Inference, the paradigm of semantically correct extrapolation, combines these two. For simple cases, basic statements are syntactically well-formed expressions available as premises. Our capacity to make syntactic transformations explains how we extrapolate new statements from such premises. Intuitively, such transformations are only logically valid if they preserve truth. The commitment to common sense realism dictates that truth is epistemologically unconstrained and it is precisely this commitment which entails that logic provides an objective basis for semantically correct language use.

I have, however, also argued that basic statements are, at least potentially, defeasible. Following Hacker I have argued that empirical findings may trigger a revision of linguistic and psychological concepts. Following Boghossian I have argued that we have weak *a priori* knowledge of inferential validity—that our knowledge of inferential validity can be toppled if the right sort of evidence is produced. This led me to develop an account of the conditions

under which a transfer of warrant from premises to conclusion is secured. The conditions are:

1) *S*'s justification for believing the premises is suitably independent of his justification for believing the conclusion, but both—premises and conclusion—are common ground after the conclusion has been drawn
2) *S* is justified in believing that the inference is valid iff the inference can be expressed through a basic statement or *S* is justified in believing that the inference is actually truth-preserving.

We must now see which calculi we can devise as object of comparison with which we can explain inferring as conducted in natural language use. A suitable calculus must have syntactically licit transformations and its transformations should preserve truth and transfer of warrant from premises to conclusions. I do not think that we can make good *prima facie* conjectures about the variety of calculi we can come up with, but I think that the constraints on suitability restrict the domain of enquiry in an appropriate way.

The reasoning we encounter in scientific enquiries in accord with methodological naturalism has, however, a different status. Natural science need not exclusively utilise the principles governing inferences in natural language use. Rather, the sort of abstractions and idealisations these enquiries require may necessitate formal calculi, the rules of inference for which diverge from the rules of natural language use. Quantum mechanics uses quantum logic and theoretical linguistics uses algebraic descriptions of syntactic transformations—in both we find inferential patterns not available in natural language use. I submit that this is necessary if scientific enquiries are to discover and make new ideas available—even though such new ideas may initially seem foreign (and maybe bewildering) if looked at from the perspective of natural language use. Common sense realists need not be worried about this. As long as scientific ways of inferring preserves truth, all is well. For then we can refine both common sense and science by comparing the truths available to common sense to the truths available through science.

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Glossary:

- *Anti-Reductionism*: facts about language use are not to be explained in terms which eschew semantic or intentional vocabulary, they are *sui generis*.
- *Basic concept*: a basic concept is a concept the justified application of which does not require warrant.
- *The Berkeleyan proposal*: Kripkenstein's Berkeleyan proposal consists in the claim that the search for a metaphysical foundation of semantic correctness (and other cases of correct extrapolation) is misconceived.
- *Blame-Acceptance Connection*: Being epistemically blameless or blameworthy partially depends on what other people are ready to accept during a conversation.
- *Central explanandum, of the present thesis*: how can we extrapolate semantically correct uses of language in an indefinite number of cases, which we have not encountered previously?
- *Common-sense realism*: tokens of most current observable common-sense and scientific physical types objectively exist independently of the mental.
- *Defeasibility-criteria*: defeasibility-criteria warrant, if they obtain, a falsification of statements ascribing meaning, intention, mental states or concept-possession to people in particular cases.
- *Epistemological correctness*: an extrapolation is epistemologically correct if it is suitably warranted.
- *Exclusionist accounts, of grasping as extrapolating*: exclusionist accounts explain grasping as extrapolating in terms of what is not correct.
- *External relation, between thought and fact*: an external relation between thought and fact construes them as related through a mediating element like a satisfaction or a disposition.
- *Factual correctness*: an extrapolation is factually correct if its correctness depends on what facts obtain.
- *Grasping as Extrapolating*: grasping a rule, a meaning of a word or a concept centrally involves extrapolating a possibly indefinite number of new applications based on a finite number of known cases.
- *Implicit definitions of logical constants*: grasping the meaning of a logical constant means knowing its import on the validity of inferences from and to statements containing it.

- *Intention to follow a rule*: any rule requires that my intention to follow it determines what is to count as following that rule for indefinitely many cases in the future, even though there may be exceptions.
- *Internal relation, between thought and fact*: an internal relation between thought and fact construes them as immediately related. An internal relation is also constitutive of its *relata* and there is nothing further which grounds them. It therefore explains and justifies what the thought and the fact are in terms of each other.
- *Justification-question*: facts constituting language use also justify a speaker's use, it must justify whether somebody means addition by 'plus' or quaddition.
- *Modus ponens model of rule-following*: every rule implicitly or explicitly contains a conditional, satisfaction of which counts as rule-following.
- *Normative assessment of language use*: no matter what one is disposed to say, it will always be possible to assess what has been said as correct or as incorrect. Such assessments are normative and they are especially common in situations where somebody says something for the first time.
- *Objectivity in language use*: a language user's opinions about what counts as objectively correct or incorrect language use are not optional, but demanded.
- *Platitude about objectivity*: objectivity requires that the opinions which we form are in no sense optional or variable as a function of permissible idiosyncrasy, but are *demanded* of us—objectivity hence also requires that there will be a robust sense in which a particular point of view *ought* to be held, and a failure to hold which can be understood only as a rational/cognitive failure.
- *Proof-Truth Connection:* Concerning justified beliefs about formal validity, justified belief in truth should be expected to rest on proof and justified belief through proof must move us from truths to truth.
- *Saying something*: saying something is not merely emitting a noise and it can be explained on objective grounds.
- *Sceptical conclusion*: there is not fact of the matter about what any linguistic expression means.
- *Sceptical Paradox*: on the one hand, we are sure that there is an appropriate fact determining semantic correctness and that we are authoritative about what we mean, yet we cannot, it seems, pin it down.
- *Semantic correctness*: semantic correctness is concerned with the correct usage of linguistic expressions based on what those linguistic expressions mean.

- *Semantic realism*: according to semantic realism, we must explain how language latches onto reality, precisely because factual matters are possibly independent of thought and talk.
- *Theory of meaning (in Dummett's sense)*: an account of meaning that envisages it as a function of components and structure.

- 'Reconsidering the Epistemology of Deductive-Inferential Validity' in: *Abstracta--Linguagem, Mente e* Ação 4:1, pp. 44-56, 2008.
- 'The Expression of Self-consciousness in Kamala Das's "An Introduction"' in: *Consciousness, Literature, and the Art*. August 2008.
- 'Against Crude Semantic Realism' in: *Proceedings of the Graduate Conference on Meaning and Truth. ILLC Technical Notes X-2010*-1. January 2010.
- 'Chomsky's Methodological Naturalism and the Mereological Fallacy' In: P. Stalmaszczyk (ed.) *Philosophical and Formal Approaches to Linguistic Analysis*. Frankfurt a.M.: Ontos. 2012.
- 'Limits of Depiction' forthcoming in: *Journal of Aesthetic Education,* 2013.
- 'On John Mikhail's Metaethics' forthcoming
- 'Wittgenstein and Buddhism? On Alleged Affinities with Zen and Madhyamaka' forthcoming

Presentations

- 'Reconsidering the Epistemology of Deductive-Inferential Validity' presented at the Carnap lectures/Graduate Conference at the Ruhr-Universität Bochum, Germany. February 2008.
- Presentation of my MPhil/PhD project to non-philosophers at the 'Graduate School Networking Event and Buffet Lunch' at the University of Birmingham, May 2008.
- 'Acceptance in Practice: A Missing Link in Stalnaker's Pragmatic Presuppositions' presented at the Open Session at the Joint Session Conference of the Aristotelian Society/Mind Association, Aberdeen, July 2008.
- 'A Critical Remark on Brandom's Conception of the Conditional' presented at the SOPHA 2009 conference at the University of Geneva, September 2009.
- 'Against Crude Semantic Realism' presented at the Graduate Conference on Meaning and Truth in Amsterdam (organised by the ILLC), October 2009.
- 'On How (not) to Understand Kripke's Rule-Following Scepticism' presented at the CEU Philosophy Graduate Conference, March 2010.
- 'Truth-Characterisation and Syntax of Natural Languages' presented at the Open Minds V Graduate Conference at the University of Manchester, June 2010.

- 'Chomsky's Methodological Naturalism and the Mereological Fallacy' presented at the Second International Conference on Philosophy of Language and Linguistics at the University of Lodz, May 2011.
- 'The Limits of Depiction' presented at the workshop on John Hyman's *The Objective Eye* at the University of Zurich, September 2011.
- 'On John Mikhail's Metaethics' presented at the workshop 'Explication and Reflective Equilibrium' in the series 'Zurich Doctoral Workshops on Methods in Philosophy' at the University of Zurich, May 2012.

Awards and Scholarships

- Essay Award for 'Reconsidering the Epistemology of Deductive-Inferential Validity' issued by the Institute for Philosophy at the Ruhr-Universität Bochum, Germany. February 2008.
- PhD Scholarship from the University of Zurich's Forschungskredit. July 2010 – April 2012.

Non-Curricular Academic Activities

- August 2012 Part of the organising committee of the international conference 'Perspectives on Wittgenstein's Philosophy of Mathematics' at the University of Zurich
- May 2012 Organisation (together with Georg Brun, ETH) of the workshop 'Explication and Reflective Equilibrium' in the series 'Zurich Doctoral Workshops on Methods in Philosophy'
- June 2008 Initiator and head of the organising committee of the Graduate Conference 'Time and Consciousness' at the University of Birmingham.
- 2007/2008 Student representative of the MPhil students at the Philosophy Department, University of Birmingham.
- 2007 Student representative in the commission for filling the vacant professorship in linguistics at the English Seminar, University of Basle (Switzerland).

Non-Academic Activities

- 2009-2010 Private tutor for pupils of all levels at Know-Now AG, Zurich

- 2005 Substitute teacher at the Kollegium Spiritus Sanctus, Brig-Glis (Switzerland).

Transferable Skills

- Project Management for Researchers, certified by the University of Zurich
- Open Access Publishing, certified by the University of Zurich
- Research Methods, certified by the University of Birmingham

Language Skills

- German: native speaker
- English: proficient user
- French: advanced user
- Latin: basic knowledge
- Attic Greek: basic knowledge
- Sanskrit: basic knowledge

References

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